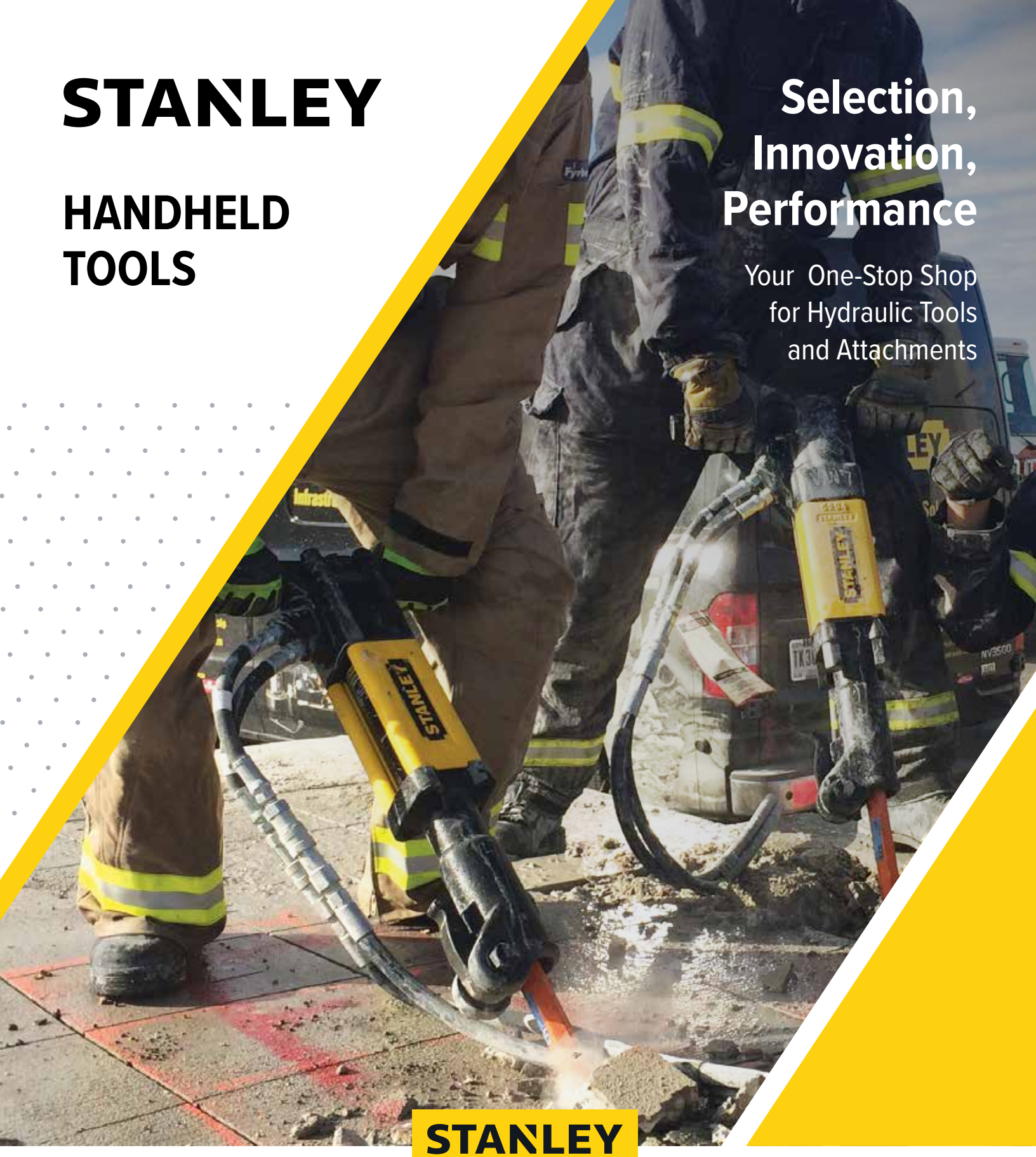
STANLEY

HANDHELD TOOLS

Selection, Innovation, Performance

Your One-Stop Shop for Hydraulic Tools and Attachments



STANLEY Infrastructure

INDUSTRIAL TOOLS & ATTACHMENTS

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COMPANY OVERVIEW

GREAT BRAND, GREAT TOOLS

STANLEY has a proud tradition of being a global leader in the development of a wide range of innovative hydraulic products used in a variety of industries and applications throughout the world. As a proud member of STANLEY Black & Decker, a 175 year old company committed to the manufacture and distribution of quality tools for the professional, industrial, and consumer, we at Stanley Infrastructure are dedicated to providing our customers with innovative customer-driven product designs, world class quality, unmatched product support, and superior value.

GLOBAL REPRESENTATION

STANLEY Infrastructure produces an extensive line of products for use in construction, demolition, scrap processing, recycling, utilities, municipalities, railroads, industry, landscaping, underwater, construction, and specialty trades. STANLEY Infrastructure Tools has sales offices and distributors throughout North America, Central America, South America, Europe, Asia, Australia, and the Middle East.

OUR MISSION

STANLEY is committed to providing innovative solutions for infrastructure based applications. We are for those who make the world move.

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CATALOG INDEX

POWERFUL TOOLS FOR POWERFUL JOBS

Professionals turn to hydraulic tools when they need to get the toughest jobs done. Nothing matches the performance of hydraulic tools to cut through rock & concrete, drive posts or spikes, or pump a flooded culvert. Because their energy is derived from compressed oil, hydraulic tools can pack a big punch in a little package. Their inherent efficiency means they're friendlier to the environment than comparable air or gas tools. And because they're self-lubricating, they last several times longer.

Today we offer dozens of tools that can operate dependably off a single power source and professionals around the world are turning to the power of STANLEY Infrastructure for their most powerful jobs.

ADVANTAGES OF HYDRAULIC TOOLS

- Durability & Maintenance - Hydraulic tools are designed to last with minimal maintenance requirements. Because internal components are bathed in hydraulic oil, it is not uncommon for them to last 15 years or more.
- Low Noise - Hydraulic tools are significantly quieter than comparable gas-powered and pneumatic alternatives.
- Increased Power & Productivity - Since compressed oil transfers far more energy than compressed air, nothing packs as much pound-for-pound punch as hydraulic. That allows us to design a smaller, lighter tool that can deliver more power than even the biggest gas or pneumatic alternatives.
- Cold Conditions - Hydraulic tools can be operated in sub-zero temperatures without freezing up.
- Wet Conditions - Wet weather does not affect hydraulic tools. In fact, many models are available for use underwater.
- Enclosed Spaces - Hydraulic tools don't produce exhaust and their power sources can be stationed remotely. Not so with gas-powered tools which often discharge engine exhaust directly onto the operator or with pneumatic tools which can atomize small droplets of lubricating oil into the surrounding atmosphere.
- Cost-Effective, Environmentally Friendly Operation - Hydraulic tools are inherently more efficient, meaning they require less energy to perform the same work as alternative tools, saving time and money. Hydraulic tool circuits are designed to keep oil in and contaminants out and our tools can be used with a variety of biodegradable environmentally safe hydraulic oils, so they can be operated with minimal impact to their surrounding environment.

Nothing equals the impact force of hydraulic-powered breakers. With the best power-to-weight ratio, higher blow energy, and a lower noise level than pneumatic breakers, our hydraulic percussion tools are simply the best choice. Our 70-lb. class breakers, for instance, deliver roughly the same impact energy as most 90-lb. pneumatic breakers. Internal components are continually bathed in hydraulic oil, providing long-lasting performance with minimal maintenance requirements. And because the hydraulic system is totally enclosed, there's no tool exhaust or oil atomization often found with gas-powered or pneumatic alternatives.

Compared to other options, hydraulic breakers offer:

- Higher impact than comparably sized alternative platforms
- No tool exhaust
- Quieter operation than pneumatic tools allows for use in sensitive areas
- Hydraulic oil provides continuous lubrication of internal parts for longer service life
- Modular, re-buildable design platform improves serviceability
- Handles system back pressures up to 250 psi / 17 bar
- Feathering ON/OFF valve to control speed and make initial tool placement easy
- Trouble-free diaphragm accumulator for added blow energy

Our hydraulic breakers are used around the world in utility construction, street maintenance, repair of water and gas mains, and general contracting jobs.

A general rule of thumb when sizing the appropriate breaker for your application is to use 10 pounds for each inch of material. A 40-pound breaker, for instance, is a good fit for 4-inch concrete. A 90-lb breaker would be used to break 9-inch concrete.

LIGHT TO MEDIUM DUTY BREAKERS MODEL BR45 - 40# PLUS CLASS

The BR45 is light to medium duty breakers for work in the 35 to 55 pound class around the globe.

SPECIFICATIONS

Application: Light concrete or asphalt breaking or scoring, small rock breaking, rod driving, tamping.
Tool Bit Size: 7/8 x 3-1/4 in., 1-1/8 x 6 in., 1-1/4 x 6 in. or 1 x 4-1/4 in.
Hyd. Flow: 4-6 gpm / 15-24 lpm, 5.5 gpm / 20 lpm or 7-9 gpm / 26-34 lpm.
Weight: 37 lbs / 17 kg to 58 lbs / 26 kg
Length: 22.5 in. / 57 cm to 30 in. / 76 cm
Width: 14 in. / 36 cm to 18 in. / 45 cm
Connection: 3/8 in. flush face quick disconnect couplers

FEATURES

- Convenient, maneuverable size makes this class a favorite for light to medium sized jobs
- BR45550 model designed for operation at 4-6 gpm / 15-24 lpm range
- T-type or Anti-vibration handle (see order information)
- EZ-Ride™ or standard foot (see order information)
- Hose whips and flush-face quick disconnect couplers

40 LB 2-6" CONCRETE

MEDIUM DUTY BREAKERS international 50# CLASS

SPECIFICATIONS

Application: Concrete or asphalt breaking or scoring, small rock breaking, rod driving.
Tool Bit Size: 1-1/8 x 6 in., 1-1/4 x 6 in. or 1-1/4 x 6-1/4 in.
Hyd. Flow: 7-9 gpm / 26-34 lpm or 4-6 gpm / 15-23 lpm
Weight: 59 lbs / 27 kg T-Handle, 61 lbs / 27.6 kg with Anti Vibe Handle
Length: 28 in. / 71 cm with T-Handle, 29 in. / 73 cm with Anti Vibe Handle**Width:** 14.25 in. / 36 cm with T-Handle, 17.5 in. / 45 cm with Anti Vibe Handle
Connection: 3/8 in. flush face quick disconnect couplers

FEATURES

- T-type or Anti-Vibration Handle (see order information)
- Strong tie rod design for durability
- Hose whips and flush-face quick disconnect couplers

50 LB 2-6" CONCRETE

STANLEY Infrastructure

MEDIUM DUTY BREAKERS MODEL BR67 - 70# PLUS CLASS

The BR67 is a medium to heavy-duty breaker for work in the 70 pound class and above. It is highly productive in construction, street maintenance, repair of water and gas mains, and general contracting jobs.

SPECIFICATIONS

Application: Concrete or asphalt breaking or scoring; small rock breaking; rod, anchor, & stake driving.
Tool Bit Size: 1-1/8 x 6 in. or 1-1/4 x 6 in.
Hyd. Flow: 7-9 gpm / 26-34 lpm
Weight: 72 lbs / 33 kg-BR67 with T-Handle
Length: 27 in. / 68 cm-BR67 with T-Handle
Width: 16 in. / 41 cm-BR67 with T-Handle
Connection: 3/8 in. flush face quick disconnect couplers

FEATURES

- Our original breaker design
- Delivers excellent overall performance
- Provides good balance of power to weight
- T-type or Anti-Vibration handle
- EZ-Ride™ or standard foot
- Strong tie rod design for durability
- Hose whips and flush-face quick disconnect couplers

70 LB
6-8" CONCRETE

HEAVY DUTY BREAKERS MODEL BR87 - 90# PLUS CLASS

The BR87 is a heavy-duty breakers for work in the 90 pound class and heavier. With a longer piston stroke, our 90# class breakers are our hardest hitting hand held breakers.

SPECIFICATIONS

Application: Concrete or asphalt breaking or scoring, small rock breaking, rod, anchor, & stake driving.
Tool Bit Size: 1-1/8 x 6 in. or 1-1/4 x 6 in. (see ordering info)
Hyd. Flow: 7-9 gpm / 26-34 lpm
Weight: 84 lbs / 3 kg
Length: 29 in. / 73.5 cm
Width: 16 in. / 41 cm
Connection: 3/8 in. flush face quick disconnect couplers

FEATURES

- Our hardest hitting breaker class, designed for the biggest breaking jobs
- Longer stroke delivers greater impact force
- T-type handle
- EZ-Ride™ or standard foot
- Strong tie rod design for durability
- Hose whips and flush-face quick disconnect couplers

90 LB
8+" CONCRETE

STANLEY Infrastructure

BREAKERS (NORTH AMERICA)

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Capacity	Misc.
BR45	BR45110	45 lbs / 20 kg	25 in. / 65 cm	14 in. / 36 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	7/8 x 3-1/4 in. Hex	T Handle
	BR45120	51 lbs / 23 kg	25 in. / 65 cm	14 in. / 36 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/8 x 6 in. Hex	T Handle
	BR45120E	51 lbs / 23 kg	25 in. / 65 cm	14 in. / 36 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/8 x 6 in. Hex	EZ Ride Foot
	BR45125S	55 lbs / 25 kg	28 in. / 72 cm	17.5 in. / 45 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/8 x 6 in. Hex	Anti Vibration
	BR45130	51 lbs / 23 kg	25 in. / 65 cm	17.5 in. / 45 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/4 x 6 in. Hex	T Handle
	BR45130E	51 lbs / 23 kg	25 in. / 65 cm	14 in. / 36 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/4 x 6 in. Hex	EZ Ride Foot
	BR45135S	55 lbs / 25 kg	28 in. / 72 cm	17.5 in. / 45 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/4 x 6 in. Hex	Anti Vibration
	BR45150	45 lbs / 20 kg	25 in. / 65 cm	14 in. / 36 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1 x 4-1/4 in. Hex	T Handle
	BR45550	45 lbs / 20 kg	25 in. / 65 cm	14 in. / 36 cm	4-6 gpm / 15-24 lpm	1300-2000 psi / 90-140 bar	2250 psi / 155 bar	1 x 4-1/4 in. Hex	T Handle
BR50	BR50120	52 lbs / 24 kg	26.25 in. / 67 cm	13.75 in. / 35 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/8 x 6 in. Hex	T Handle
	BR50130	52 lbs / 24 kg	24 in. / 61 cm	13.75 in. / 35 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/4 x 6 in. Hex	T Handle
	BR50120E	52 lbs / 24 kg	26.25 in. / 67 cm	13.75 in. / 35 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/8 x 6 in. Hex	EZ Ride Foot
	BR50130E	52 lbs / 24 kg	26.25 in. / 67 cm	13.75 in. / 35 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/4 x 6 in. Hex	E Ride Foot
	BR50125	52 lbs / 24 kg	29.25 in. / 74 cm	18 in. / 46 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/8 x 6 in. Hex	Anti Vibration
	BR50135	52 lbs / 24 kg	29.25 in. / 74 cm	18 in. / 46 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/4 x 6 in. Hex	Anti Vibration
BR67	BR67120	72 lbs / 33 kg	27 in. / 68 cm	16 in. / 41 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/8 x 6 in. Hex	T Handle
	BR67120E	72 lbs / 33 kg	27 in. / 68 cm	16 in. / 41 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/8 x 6 in. Hex	EZ Ride Foot
	BR67125	78 lbs / 36 kg	29 in. / 73 cm	8 in. / 46 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/8 x 6 in. Hex	Anti Vibration
	BR67130	72 lbs / 33 kg	27 in. / 68 cm	16 in. / 41 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/4 x 6 in. Hex	T Handle
	BR67130E	67 lbs / 30 kg	27 in. / 68 cm	16 in. / 41 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/4 x 6 in. Hex	EZ Ride Foot
	BR67135	78 lbs / 36 kg	29 in. / 73 cm	18 in. / 46 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/4 x 6 in. Hex	Anti Vibration
BR87	BR87120	84 lbs / 38 kg	29 in. / 73.5 cm	16 in. / 41 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/8 x 6 in. Hex	T Handle
	BR87120E	84 lbs / 38 kg	29 in. / 73.5 cm	16 in. / 41 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/8 x 6 in. Hex	EZ Ride Foot
	BR87130	84 lbs / 38 kg	29 in. / 73.5 cm	16 in. / 41 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/4 x 6 in. Hex	T Handle
	BR87130E	84 lbs / 38 kg	29 in. / 73.5 cm	16 in. / 41 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/4 x 6 in. Hex	EZ Ride Foot

BREAKERS INTERNATIONAL

BR45	BR4514801	55 lbs / 25 kg	28 in. / 72 cm	17.5 in. / 45 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	7/8 x 3-1/4 in. Hex Parallel	CE, Anti Vibration
	BR4516801	55 lbs / 25 kg	28 in. / 72 cm	17.5 in. / 45 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1 x 4-1/4 in. Hex Parallel	CE, Anti Vibration
	BR4556801	56 lbs / 25 kg	28 in. / 72 cm	17.5 in. / 45 cm	4-6 gpm / 15-24 lpm	1300-2000 psi / 90-140 bar	2250 psi / 155 bar	1 x 4-1/4 in. Hex	CE, T Handle
BR50	BR5057801	56 lbs / 25 kg	26.25 in. / 67 cm	13.75 in / 35 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/4 x 6-1/4 in. Hex	CE, Anti Vib., EZ Ride Foot
	BR5057801	56 lbs / 25 kg	26.25 in. / 67 cm	13.75 in/ / 35 cm	4-6 gpm / 15-24 lpm	1300-2000 psi / 90-140 bar	2250 psi / 155 bar	1-1/4 x 6-1/4 in. Hex	CE, Anti Vib., EZ Ride Foot
BR67	BR6717801A	78 lbs / 36 kg	29 in. / 73 cm	18 in. / 46 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1 x 4-1/4 in. Hex	CE, Anti Vib., EZ Ride Foot
BR87	BR8717201	84 lbs / 38 kg	29 in. / 73.5 cm	16 in. / 41 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1-1/4 x 6 in. Hex	CE, EZ Ride Foot

BREAKER ACCESSORIES

Model	Part No.	Description
7/8 in. Hex x 3-1/4 in.	02328	Clay Spade, 16 in. U/C
	02330	3 in. Chisel, 14 in. U/C
	02339	1 in. Chisel, 14 in. U/C
	02341	Asphalt Cutter, 5 in. blade x 11 in. U/C
	04401	Moil Point, 18 in. U/C
	04961	Moil Point, 14 in. U/C
	05255	Rod Driver, 3/4 in.
1 in. Hex x 4-1/4 in.	07702	Moil Point, 14 in. U/C
	07703	Narrow Point, 14 in. U/C
	07704	3 in. Chisel, 14 in. U/C
	07705	Clay Spade, 5-1/2 in. blade
	07706	Asphalt Wedge, 3 in. wide
1-1/8 in. Hex x 6 in.	02331	Clay Spade, 5-1/2 in. blade
	02332	Asphalt Cutter 5 x 11 in. U/C
	02333	Moil Point 14 in. U/C
	02334	3 in. Chisel, 14 in. U/C

Model	Part No.	Description
1-1/8 in. Hex x 6 in	03990	Chisel Point 14 in. U/C
	04176	Ground Rod Driver, 1 in. rod
	08106	Asphalt Wedge
	08107	Keen Kut Chisel
1-1/4 in. Hex x 6 in.	02335	Asphalt Cutter, 5 in. blade x 11 in. U/C
	02336	Moil Point, 14 in. U/C
	02337	3 in. Chisel, 14 in. U/C
	02338	1 in. Chisel with heavy duty 14 in. U/C
	04367	Ground Rod Driver, 1 in. rod
	04404	Moil Point Heavy Duty 18 in.
	04405	Clay Spade, 18 in. blade
	07862	Keen Kut Chisel
	08119	Asphalt Wedge
	09262	Clay Spade, 5-1/2 in. blade
	17782	Detachable Shank

CHIPPING HAMMERS MODEL CH15

The CH15 is a small chipping hammer designed for light duty chipping. It is commonly used for manhole and utility vault modifications or masonry repair and demolition. The body of the tool is shock and heat insulated. Comes with hose whips and flush-face quick disconnect couplers.

SPECIFICATIONS
Application: Chipping concrete, rock, or masonry such as utility vaults, street curbing, masonry work.
Tool Bit Size: .580 hex Shank Oval Collar, Steel Bits
Hyd. Flow: 4-6 or 4-9 gpm / 15-23 or 15-34 lpm
Weight: 16 lbs / 7.25 kg
Length: 17 in. / 43 cm
Width: 3 in. / 8 cm
Connection: 3/8 in. flush face quick disconnect couplers

CHIPPING HAMMERS MODEL CH18

The CH18 is a light but powerful chipping hammer designed for medium duty chipping. It is commonly used for manhole and utility vault modifications or masonry repair and demolition. The tool's "D" handle and tool bit holder are shock and heat insulated for operator comfort. Tool steels are held in place by a slide that is ball-and-spring detented. The CH18 uses standard .580-inch hex, round collar, chipper tool bits and comes with hose whips and flush-face quick disconnect couplers.

SPECIFICATIONS
Application: Chipping light concrete, rock, or masonry such as utility vaults, street curbing, masonry work.
Tool Bit Size: .580 in. Hex Shank, Round Collar, Steel Bits
Hyd. Flow: 7-9 gpm / 26-34 lpm
Weight: 24 lbs / 11 kg
Length: 20 in. / 51 cm
Width: 3 in. / 8 cm
Connection: 3/8 in. flush face quick disconnect couplers

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Capacity	Misc.
CH15	CH1513101	16 lbs / 7.3 kg	17 in. / 43 cm	3 in. / 7.6 cm	4-9 gpm / 15-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	.580 Hex - Oval Collar	CE, Solid Retainer
CH18	CH18111	24 lbs / 10.9 kg	20 in. / 51 cm	3 in. / 7.6 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	.580 Hex-Round Collar	-

Accessories

Model	Part No.	Description
CH15	66256	Bull Point, .580 Hex, Oval Collar
	66257	Narrow Chisel Bit, .580 Hex, Oval Collar
CH18	02278	Flat Chisel Bit, 1 in. x 18 in. .580 Hex Rd. Collar

Model	Part No.	Description
CH18	02279	Bull Point Bit, 1 in. x 18 in. .580 Hex Rd. Collar
	03690	Chisel Bit, 1 in. x 9 in. .580 Hex Round Collar
	03963	Chisel Bit, 2 in. x 5 in. .580 Hex Round Collar

DIGGERS MODEL DR19

SPECIFICATIONS
Application: Digging and rod driving in heavy clay, light shale, hardpan, frozen ground or dry hard dirt.
Tool Bit Size: 7/8-in. Hex x 3-1/4 in. Shank Steel Bits
Hyd. Flow: 7-9 gpm / 26-34 lpm
Weight: 24 lbs / 10.9 kg
Length: 20 in. / 50.8 cm
Width: 3 in. / 8 cm
Connection: 3/8 in. flush-face quick disconnect couplers

The DR19 is a compact digging spade for digging in materials such as heavy clay or light shale. The tool's "D" handle and tool bit holder are shock and heat insulated for operator comfort. Tool steels are held in place by a slide that is ball-and-spring detented. The DR19 uses standard 7/8-inch hex, round collar, steel tool bits and comes with hose whips and flush-face quick disconnect couplers.

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Blows/ Minute	Capacity
DR19	DR19111	24 lbs / 10.9 kg	20 in. / 50 cm	3 in. / 7.6 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	1800 bpm	7/8-in. x 3-1/4 in. Shank

Accessories

Model	Part No.	Description
DR19	02328	Clay Spade, 16 in. U/C
	02330	3 in. Chisel, 14 in. U/C
	02339	1 in. Chisel, 14 in. U/C

Model	Part No.	Description
DR19	02341	Asphalt Cutter, 5 in. blade x 11 in. U/C
	04401	Moil Point, 18 in. U/C
	05255	Rod Driver, 3/4 in.

POST DRIVER MODEL PD45

SPECIFICATIONS
Application: Drives a variety of shapes and sizes of sign posts
Capacity: U-Channel Posts, Square Posts, Round Post, Delineators
Hyd. Flow: 7-9 gpm / 26-34 lpm
Weight: 65 lbs / 29 kg
Length: 30 in. / 76 cm
Width: 10 in. / 25 cm
Connection: 3/8 in. flush face quick disconnect couplers

The PD45 features dual guiding handles, a lifting eye and remote or integral On/Off Valve. Models with integral triggers run the full length of the handles and are spring loaded to the OFF position. A model is available to drive DOT required breakaway posts to within 4 inches / 100 mm above ground level. All PD45 models are furnished with flush faced quick disconnect couplers.

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Capacity	Misc.
PD45	PD45131	65 lbs / 29 kg	30 in. / 76 cm	10 in. / 25 cm	7-9 gpm / 26-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	U-Channel, Delineator, Square & Round Post	In-Line Valve
	PD45132	67 lbs / 30 kg	30 in. / 76 cm	10 in. / 25 cm	7-9 gpm / 26-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	U-Channel, Delineator, Square & Round Post	Valve In Handle
	PD45132G	67 lbs / 30 kg	30 in. / 76 cm	10 in. / 25 cm	7-9 gpm / 26-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	U-Channel, Delineator, Square & Round Post	Valve In Handle Extended Anvil
	PD45151	65 lbs / 29 kg	30 in. / 76 cm	10 in. / 25 cm	7-9 gpm / 26-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	U-Channel, Delineator, Square & Round Post	No Valve, Hoses, or Couplers

Accessories

Part No.	Description
15184	Adapter - 1-3/4 in. square post
15185	Adapter - 2 in. round post
15186	Adapter - 2-1/4 in. sq. post

Part No.	Description
15187	Adapter - 2 in. sq. post
67784	Adapter - 1-3/4 in. round post

Post Puller MODEL PP10

The PP10 is designed to remove flanged type sign posts and irregularly shaped posts up to 8 in. / 20 cm wide. It features an 8 inch / 203 cm stroke and pulling force of 9800 lbs / 4450 kg. The PP10 uses two methods to solve post pulling problems. For flanged posts, the PP10 uses gripper jaws to grasp the flange. For many other posts, a chain is used. Pins on the end of the chain may be inserted into holes in perforated posts to keep the chain from sliding. A control valve is located on the tool. The PP10 is furnished with gripper jaws, chain with pins, and flush face quick disconnect couplers.

SPECIFICATIONS
Application: Pulls a variety of sign and fence posts
Capacity: Sign posts up to 8 in. / 20 cm Wide
Hyd. Flow: 3-9 gpm / 11-34 lpm
Weight: 70 lbs / 32 kg
Length: 13 in. / 32 cm
Width: 14 in. / 35 cm
Connection: 3/8 in. flush face quick disconnect couplers

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Capacity	Misc.
PP10	PP10100	70 lbs / 32 kg	13 in. / 32 cm	14 in. / 35 cm	3-9 gpm / 11-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	8 in. / 20 cm Post	-

Spike Driver Model SD67

STANLEY'S SD67 Spike Driver provides a strong level of performance for the toughest applications. The anti-vibration handle and the two length options, help reduce operator fatigue.

FEATURES
- Two length options are available which allow operator to stand in a fully-upright position for better comfort.
- 1300 Blow-Per-Minute design makes quick work of any spike being driven, even in the hardest ties.
- Feathering On/Off Valve allows the operator to control the output energy of the tool, providing more control and ease of handling.
- Diaphragm-Type Accumulator design provides for ease of maintenance and extended service life of the tool.

Model	Description	Handle Width	Cup Width	Flow Range	Pressure	Weight	Included Equipment
SD67101	ANTI-VIBRATION HANDLE, SHORT 28.75 IN. / 73 CM	18 IN / 45.8 CM	2.9 IN / 7.4 CM	5-10 GPM / 140 BAR	2,000 PSI / 140 BAR	70 LBS / 31.8 KG	HOSE WHIPS, FLUSH-FACE COUPLERS
SD67141	ANTI-VIBRATION HANDLE, LONG 32.25 IN. / 82 CM	18 IN / 45.8 CM	2.9 IN / 7.4 CM	5-10 GPM / 140 BAR	2,000 PSI / 140 BAR	70 LBS / 31.8 KG	HOSE WHIPS, FLUSH-FACE COUPLERS

Accessories

Part No.	Description
31254	ACCUMULATOR CHARGING KIT

34% LIGHTER* AND BEST-IN-CLASS ERGONOMICS

STANLEY'S SPL31 Spike Driver offers a patented automatic pull cycle to reduce kickback and improve ease of use. Its 34%* weight reduction directly reduces the physical demand / fatigue of the operator. The reduction also gives the operator improved control and ease of use. The SPL31 side carry handle offers portability and ergonomics when carrying the puller 100-200 ft. down the track. The SPL's side placement of the hose whips protects the couplers and whips from possible abuse and damage while still plumbing straight into the tool. 34% weight reduction, increased handle durability, best-in-class ergonomics and overall improved value.

*COMPARED TO THE STANLEY SP48

PERFORMANCE BENEFITS

Automatic Cycle
SPL31 offers a patented Automatic Pull Cycle to reduce kickback and improve ease of use for the user.

Weight Reduction
34%** weight reduction directly reduces the physical demand/fatigue of the user. The reduction also gives the user improved control and ease of use.

Carry Handle
The new SPL31 side carry handle offers portability, ease of use and ergonomics when carrying the puller 100-200 ft down the track.

**Compared to the Stanley SP48

FEATURES

Redesigned handle for improved durability and ergonomics

New side carry handle for improved ease of use and ergonomics.

Industry-leading pulling force of 16,647 lbs.

Composite hydraulic cylinder for maximum strength and reduced weight.

New Engineered Seal Design for 60% increase in life.**

Redesigned lower chute for decreased weight.

**Compared to the Stanley SP48

Model	Description	Handle Width	Pulling Force	Flow Rate	Pressure	Weight	Included Equipment
SPL31A	SPIKE PULLER, LIGHTWEIGHT, AUTOMATIC CYCLE	16.25IN / 41.29 CM	16,647 LBS / 7,550 KG	5-10 GPM / 18-38 LPM	2,000 - 2500 PSI / 137-172 BAR	31 LBS*	HOSE WHIPS AND COUPLERS
SPL31A-S	SPIKE PULLER, LIGHTWEIGHT, 2-STAGE CYCLE, TRIGGER LOCK	16.25IN / 41.29 CM	16,647 LBS / 7,550 KG	5-10 GPM / 18-38 LPM	2,000 - 2,500 PSI / 137-172 BAR	31 LBS*	HOSE WHIPS AND COUPLERS

*31-pound tool weight is wet without whips and couplers

Accessories

Part No.	Description
33256	GRIP JAW (QTY. 2 REQUIRED)
34876	"W" GRIP JAW CASTING (HAIR PIN - QTY. 2 REQUIRED)

HANDHELD TOOLS

TAMPERS & EARTH AUGERS

STANLEY Infrastructure

TAMPER MODEL TA54

The STANLEY TA54 Tamper is ideal for soil compaction around utility poles, signs and fence posts. With few moving parts coupled with the closed hydraulic system results in an efficient tool that requires minimal maintenance and a long tool life

Model	Part No.	Weight	Length w/o Couplers and Hose Whips	Width	Flow Range	Working Pressure	Full Relief Setting	Blows/ Minute	Valve	Shoe	Coupler
TA54	TA54103	30 lbs / 13.6 kg	71 in. / 180 cm	4 in. / 10 cm	3-9 gpm / 11-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	1600 bpm	In-handle	Kidney	Yes
	TA54603	30 lbs / 13.6 kg	69 in. / 175 cm	4 in. / 10 cm	3-9 gpm / 11-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	1600 bpm	No Valve	Kidney	Yes
	TA54603A	37 lbs / 17 kg	69 in. / 175 cm	4 in. / 10 cm	3-9 gpm / 11-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	1600 bpm	Remote In-line	Kidney	Yes
	TA54113	30 lbs / 13.6 kg	71 in. / 180 cm	4 in. / 10 cm	3-9 gpm / 11-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	1600 bpm	In-handle	6 in. Round Shoe	Yes

Accessories

Model	Part No.	Description
TA54	00833	Kidney Shoe
	00840	Round Shoe, 6 in. dia.

Model	Part No.	Description
TA54	01070	Rectangular Shoe
	72264	In-Line Valve Assembly, OC/CC

EARTH AUGER MODEL EA08

The EA08 features an output torque of 250 ft lb / 339 Nm to handle a wide variety of earth boring applications up to 18 inches / 46 cm in diameter and 42 inches / 107 cm deep. It is configured with 4 handles for two-man operation but can be used by one-man by connecting the torque tube to a power unit or other solid object. An ergonomically designed forward and reverse control valve lever is integrated into the handle. The EA08 accepts 1-3/8 in. hex female augers. The EA08 is furnished with flush face quick disconnect couplers. Augers are sold separately.

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Capacity	Misc.
EA08	EA08102A	47 lbs / 21 kg	11 in. / 30 cm	46 in. / 117 cm	7-9 gpm / 26-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	18 in. / 46 cm Dia. Auger	1-3/8 in. Hex Male, CE

Accessories

Part No.	Description
47406	Auger, 2 in. dia x 42 in. OAL (requires 58585)
47407	Auger, 3 in. dia x 42 in. OAL (requires 58586)
47408	Auger, 4 in. dia x 42 in. OAL
47409	Auger, 6 in. dia x 42 in. OAL
47410	Auger, 8 in. dia x 42 in. OAL
47411	Auger, 10 in. dia x 42 in. OAL
47412	Auger, 12 in. dia x 42 in. OAL
47413	Auger, 16 in. dia x 42 in. OAL
47414	Auger, 18 in. dia Nursery

Part No.	Description
47415	Extension Tube, 15 in. OAL
47429	Digging Tooth w/Hardface
47430	2 in. Center Screw Bit for 6-12 in.
47431	Center Screw Bit for 3 in.
47432	Center Screw Bit for 4 in.
39408	Coupler, 1-1/4 in. Square Female
58585	Drive Coupler, 13/16 x 1-3/8 in. for 47406 Auger
58586	Drive Coupler, 1-1/8 x 1-1/8 in. for 47407 Auger
39410	Auger Extension, 8 in. dia. x 36 in. OAL
65477	Drive Hub, STANLEY 1-1/4 in. Hex

STANLEY Infrastructure

HANDHELD TOOLS

CUT-OFF SAWS

CUT-OFF SAWS MODEL CO25

Options include a handle extension kit for upright operation to meet operator preference, a water attachment kit for dust suppression and a saw cart for flat concrete and asphalt cutting.

Application: Cutting metal or masonry materials such as concrete, brick, structural steel, pipe, and guardrail.

FEATURES

- Cast aluminum handle with inter-locking safety trigger
- Adjustable wheel guard
- Build-in flow control to prevent over speeding, and a blade brake that retards spindle rotation
- Two models available: clockwise or counter-clockwise rotation
- Hose whips and flush-face quick disconnect couplers

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Rotation/ RPM	Wheel Capacity	Misc
CO25	CO25141	20 lbs / 9 kg	21 in. / 53 cm	11 in. / 28 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	CCW / 4500	14 in. / 35 cm	-
	CO2514101	20 lbs / 9 kg	21 in. / 53 cm	11 in. / 28 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	CCW / 4500	14 in. / 35 cm	CE
	CO25541	20 lbs / 9 kg	21 in. / 53 cm	11 in. / 28 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	CW / 4500	14 in. / 35 cm	-
	CO2554101	20 lbs / 9 kg	21 in. / 53 cm	11 in. / 28 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	CW / 4500	14 in. / 35 cm	CE

Accessories

Model	Part No.	Description
CO25	02691	14 in. Abrasive Wheel for metal, 1 in. arbor
	02692	14 in. Abrasive Wheel for masonry, 1 in. arbor
	33228	Water Attachment for CO25

Model	Part No.	Description
CO25	69290	Slab Saw Cart
	69704	Water Tank for 69290 Saw Cart
	34175	Handle Extension Kit
	62358	Diamond Blade, 14 in. dry cut

MAXIMUM CUTTING POWER

Cutting with Hydraulic Power

Operators familiar with conventional cutting equipment such as gasoline chain saws and circle saws are easily impressed with the power of hydraulic cutting equipment because the power-to-weight ratio is significantly higher. For example, our CS06 Chainsaw produces almost twice as much power as its gasoline engine counterparts and weighs about half as much.

Compared to conventional cutting equipment STANLEY hydraulic cutting tools offer:

- More work in less time
- Less effort
- Longer tool life
- Minimal maintenance
- Minimal downtime
- Increased safety
- Longer warranty

CHAIN SAW MODEL CS05/CS06

CS06

SPECIFICATIONS

Application: Wood Cutting - Trees, Limbs, Timbers, Utility Poles, Wood Structures
Capacity: 12, 15, & 20 in. / 30, 38, & 51 cm Bars
Hyd. Flow: 4-6 gpm / 15-23 lpm for CS05, 7-9 gpm / 26-34 lpm for CS06
Weight: 6.25 lbs / 2.8 kg
Overall Length: 27, 30, & 35 in. / 69, 76, & 89 cm
Width: 9 in. / 23 cm
Connection: 3/8 in. NPT Male Adapter (couplers sold separately)

FEATURES

- Highest power-to-weight ratio of any chain saw on the market today
- Trigger Lock
- Hand guard
- Dual spool for open center or closed center operation
- Low kickback bars and chains
- Inherently low-kickback hydraulic motor
- Automatic chain oiler
- Hyrevz™ motor

STANLEY Infrastructure

CHAIN SAW MODEL CS25/CS28

FEATURES

- Used for trimming and pruning large tree branches
- Ideal for use by right-of-way crews, arborists, utilities, parks departments, grounds keepers, and forest trail maintenance crews
- Fiberglass pole handle
- Hyrevz™ motor
- Dual spool for operation on open center or closed center systems
- Automatic chain oiling

Model	Part No.	Weight	Overall Length	Width	Flow Range	Working Pressure	Full Relief Setting	Cut Capacity	Misc.
CS05	CS05610	6.25 lbs / 2.8 kg	27 in. / 69 cm	9 in. / 23 cm	4-6 gpm / 15-23 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	13 in. / 33 cm	OC/CC
	CS05620	6.25 lbs / 2.8 kg	30 in. / 76 cm	9 in. / 23 cm	4-6 gpm / 15-23 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	15 in. / 38 cm	OC/CC
CS06	CS06610	6.25 lbs / 2.8 kg	27 in. / 69 cm	9 in. / 23 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	13 in. / 33 cm	OC/CC
	CS06620	6.25 lbs / 2.8 kg	30 in. / 76 cm	9 in. / 23 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	15 in. / 38 cm	OC/CC
	CS06630	6.25 lbs / 2.8 kg	35 in. / 89 cm	9 in. / 23 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	20 in. / 51 cm	OC/CC
CS25	CS25811	9 lbs / 4 kg	90 in. / 229 cm	4.375 in. / 11 cm [1]	4-6 gpm / 15-23 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	12 in. / 30 cm	OC/CC
	CS25812	9 lbs / 4 kg	75 in. / 191 cm	4.375 in. / 11 cm [1]	4-6 gpm / 15-23 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	12 in. / 30 cm	OC/CC
CS28	CS28811	9 lbs / 4 kg	90 in. / 229 cm	4.375 in. / 11 cm [1]	7-9 gpm / 26-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	12 in. / 30 cm	OC/CC
	CS28812	8.4 lbs / 3.8 kg	75 in. / 191 cm	4.375 in. / 11 cm [1]	7-9 gpm / 26-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	12 in. / 30 cm	OC/CC

[1] Measured at motor end

Accessories

Model	Part No.	Description
CS05/CS06	07629	Rim Sprocket, .325P x 7 tooth
	07638	15 in. Saw Bar
	07639	20 in. Saw Bar
	07641	Saw Chain for 15 in. bar
	07642	Saw Chain for 20 in. bar
CS25/CS28	05144	Chain/Bar Guard

Model	Part No.	Description
ALL	12363	File Guide
	08347	13 in. Saw Bar
	08348	Saw Chain for 13 in. bar
	11464	Scrench
	33289	Chain Saw File
	11294	Flat File
	07616	Sprocket Spline Adapter
	07629	Rim Sprocket, .325P x 7 tooth

THE BEST YOU EVER SAW

Model DS06

Diamond chain saws use a revolutionary chain with laser welded segments impregnated with diamonds. This chain, coupled with a bar containing water channels for chain lubrication, make cutting concrete, brick, masonry, and stone an easy task.

A distinct advantage of a diamond chain saw over a diamond circular saw is cutting square corners without over-cut. A diamond chain saw is the perfect tool for plunge cutting for window and door openings, air conditioner cut-outs, and notching or trimming.

Diamond Chain Technology

The newest generation of diamond chains dramatically reduce the chain wear of cutting concrete. SealPro™ technology extends chain chassis life by up to 50% or more, simplifies water pressure requirements and reduces the frequency of chain tensioning adjustments.

SealPro™ technology incorporates a patented new chain chassis design that seals out abrasive contaminants. A unique 0-ring design seals the rivet-joints of the chain, keeping the abrasive materials out and the lubrication in.

Diamond chains with SealPro™ work at low water pressures eliminating the need for water booster pumps. The new chains can be used with water from an ordinary garden hose and will yield excellent chain life at pressures as low as 20 psi.

Other important advantages of SealPro™ technology are reduced chain stretch resulting in fewer tensioning adjustments over time.

Aggregate	Extra Hard		Hard	Medium		Soft		Abrasive
Material	Chert Flint	Basalt Quartz	Granite River Rock	Marble Limestone	Sandstone			Masonry, Brick, Block, Green Concrete
Approximate Moh's Scale	9	8	7	6	5	4	3	
Reinforcing Steel	Lots of Steel			Some Steel				No Steel
	1"	Double Mat	Single Mat	#5	#4	#3	Wire Mesh	
Saw Chain Wear (in.-ft.) **Pinnacle-32** **Pinnacle-37**	150 in-ft			600-800 in-ft		2000 in-ft		
Ultra-32 **Ultra-37**			200 in-ft					1500 in-ft

STANLEY Infrastructure

DIAMOND CHAIN SAW MODEL DS11

The DS11 is a heavy duty and powerful diamond chain saw that is ideal for fast cutting of concrete, reinforced concrete, conduit, brick, stone and other masonry. Plunge cut capability allows quick cutting of window, door, conduit and duct openings in walls and notching and trimming of concrete pipe. Trigger activated water for lubrication and cooling is ported through the bar and applied at the point where the concrete is being cut.

The DS11 features ergonomic handles and guards to help reduce operator fatigue, water connection, flush face quick disconnect couplers, and is powered by a STANLEY Hyrevz™ motor. The Wall Walker™ that provides leverage for cutting is standard equipment. The bar and chain are sold separately.

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Output	Discharge
DS06	DS06200001*	14 lbs / 6 kg	24 in. / 61 cm	9 in. / 23 cm	4-6 gpm / 15-23 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	13 in. / 33 cm Bar	CE
	DS063000*	14 lbs / 6 kg	24 in. / 61 cm	9 in. / 23 cm	7-9 gpm / 26-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	13 in. / 33 cm Bar	-
DS11	DS113000*	26 lbs / 11 kg	38 in. / 97 cm	9 in. / 23 cm	7-9 gpm / 26-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	15, 18 in. / 33, 46 cm Bar	CE

* NOTE: Bar and Chain Not Included - Must be Ordered Separately

Accessories

Model	Part No.	Description
DS06	35037	Bar, 13 in. Sprocket Nose
	56799	Diamond Chain, Ultra-25, 13 in., Double Bumper
	56800	Diamond Chain, Pinnacle-25, 13 in. Double Bumper
	65797	Flap Kit
DS06/DS11	20857	Chain Repair Spinner
	20858	Chain Repair Breaker
	20859	Diamond Chain Butterfly Repair Kit
	60859	Water Flow Meter, 0-7 gpm
	56767	Connecting Link, 5-Pack

Model	Part No.	Description
DS11	30305	Bar, 15 in., Sprocket nose
	30306	Bar, 18 in., Sprocket nose
	56801	Diamond Chain, Ultra-32, 15 in., Double Bumper
	56802	Diamond Chain, Ultra-37, 18 in., Double Bumper
	56803	Diamond Chain, Pinnacle-32, 15 in. Double Bumper
	58632	Diamond Chain, Pinnacle-37, 18 in. Double Bumper
	23517	Sprocket Wrench

HANDHELD TOOLS

DUCTILE IRON PIPE CHAINSAW & PUMP

STANLEY Infrastructure

UTILITY CHAINSAW MODEL DS12

STANLEY's Utility Chainsaw is a revolutionary cutting method designed to change the way the job gets done. From ductile iron to plastic pipe, this chain saw will get you in and out of the job faster, easier and safer than other methods. Utilizing a brazed layer diamond coating on a durable chain chassis, this technology provides improved access with far less excavation in a confined space such as cutting water main pipe in a ditch.

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Capacity	Misc.
DS12	DS12318	26 lbs / 11.8 kg	38 in. / 97 cm	9 in. / 23 cm	7-9 gpm / 26-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	18 in. / 45 cm Utility Bar	Utility Bar & Chain with HTMA couplers
	DS1231801	26 lbs / 11.8 kg	38 in. / 97 cm	9 in. / 23 cm	7-9 gpm / 26-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	18 in. / 45 cm Utility Bar	Utility Bar & Chain with HTMA couplers. CE

Accessories

Model	Part No.	Description
DS12	71048	18" Utility Chain
	71047	18" Bar for Utility Chain

Model	Part No.	Description
DS12	71055	Pipe Clamp Assembly
	71046	Drive Sprocket
	60859	Water Flow meter, 0-7 GPM
	23517	Sprocket Wrench

PORTABLE WATER PUMP MODEL DCP30

The DCP30 is a 12 volt pump capable of self priming up to an eight foot lift. It delivers 2.2 GPM at 40 PSI and is thermal protected to prevent overheating. A built in check valve prevents backward flow and maintains pressure after shut-off. The DCP30 is available with battery clips or a marine style DC plug. Ideal for providing adequate water for diamond concrete or ductile iron chain saws.

Model	Description
DCP30101	Water Pump, 12v DC, Battery Clip
DCP30100	Water Pump, 12v DC, Marine Type

STANLEY Infrastructure

HANDHELD TOOLS

CIRCULAR SAW & PRUNERS

CIRCULAR SAW MODEL CR27

FEATURES

- Used for trimming and pruning tree branches
- Ideal for use by right-of-way crews, arborists, utilities, parks departments, grounds keepers, and forest trail maintenance crews
- Fiberglass pole handle
- Integral Hyrevz™ motor
- Angled head
- Dual spool for operation on Open Center or Closed Center systems
- Double cone-lock blade nut
- Blade brake to reduce coast-down time
- Comes with 9" blade (34356)

Model	Part No.	Weight	Length	Flow Range	Working Pressure	Full Relief Setting	Cutting Compo-nent (included)	Couplers
CR27	CR27891	9.6 lbs / 4.4 kg	79 in. / 200.7 cm	5-7 gpm / 19-26 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	9 in. / 22.9 cm Saw Blade - 24 Tooth	No

Accessories

Part No.	Description
34356	9 in. / 22.9 cm Circle Saw Blade - 24 Tooth
00425	9 in. / 22.9 cm Circle Saw Blade - 44 Tooth

Part No.	Description
34653	Tooth Setting Tool for 34356 Blade
11299	File Guide with 7/32 in. round File

PRUNER MODEL PR41

FEATURES

- Used for selective tree limb pruning up to 2-1/4 inch / 5.7 cm cut
- Ideal for use by right-of-way crews, arborists, utilities, parks departments, grounds keepers, and forest trail maintenance crews
- Lightweight head design that provides easy handling
- Full power on both opening and closing cycles
- Improved geometry of knife and hook provides increased cutting efficiency
- Fiberglass pole handle
- Sold in either open center or closed center configurations

Model	Part No.	Configuration	Weight	Length	Flow Range	Working Pressure	Full Relief Setting	Cutting Component (included)	Couplers
PR41	PR41131	Open Center	11.5 lbs / 5.2 kg	84 in. / 213.4 cm	3-9 gpm / 11-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	2-1/4 in. / 5.7 cm Cut Knife	No
	PR41231	Closed Center	11.5 lbs / 5.2 kg	84 in. / 213.4 cm	3-9 gpm / 11-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	2-1/4 in. / 5.7 cm Cut Knife	No

Accessories

Model	Part No.	Description
PR41	56849	Knife

GRINDER MODEL GR30

The GR30 can be used for grinding and cleaning with either cup or standard type grinding wheels and wire or nylon brushes. The GR30 features an assist handle, adjustable, rotating wheel guard, insulated handle, flow control for over-speed prevention, counter-clockwise rotation and is powered by an integral STANLEY Hyrevz™ motor. The GR30 is furnished with hose whips and flush face quick disconnect couplers.

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Rotation/ RPM	Wheel Capacity	Misc.
GR30	GR30701	13 lbs / 5.9 kg	8 in. / 20 cm	28 in. / 71 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 70-140 bar	2250 psi / 155 bar	CCW / 5800	9 in. / 22.8 cm	-
	GR3070101	13 lbs / 5.9 kg	8 in. / 20 cm	28 in. / 71 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 70-140 bar	2250 pis / 155 bar	CCW / 5800	9 in. / 22.8 cm	CE

Accessories

Model	Part No.	Description
GR30	02587	Grinding Wheel for metal, 9 in. dia. x 5/8 in., 11 thd. Arbor
	02588	Grinding Wheel for masonry, 9 in. dia. x 5/8 in., 11 thd. Arbor

Model	Part No.	Description
GR30	03691	Grinding Wheel, 7 in. dia. x 5/8 in., 11 thd. Arbor
	05194	Depressed Center Wheel Adapter

GRINDERS MODEL HGL61 HGL80 HGL81

FEATURES: HGL80, HGL81 and HGL61

- 12% weight reduction over the HG80 providing the industry's lightest hydraulic hand held grinders.
- High performance hydraulic motors providing industry leading grinding speed and power.
- Redesigned handle eliminates the hydraulic oil from the handle, improves tool balance and user comfort.
- New long and short rear handle options improve user ergonomics.
- New adjustable front handle for improved control and ergonomics.
- New trigger interlock improves tool durability and ease of use.
- Durable grip coating on front and rear handles provides a solid grip in the toughest conditions.
- New oversized shaft interlock for ease of use during wheel changes.
- A built-in control valve prevents the chance of excessive spindle speed and also protects the motor, resulting in increased tool life.

HGL80 - Long Handle
Length: 23.35 Inches

HGL81 - Short Handle
Length: 19 Inches

HGL61 - Short Handle
Length: 19 Inches

Model	Description	Motor Rotation	Weight	Length	Width
HGL80	1" x 8" Grinder	Clockwise	13.6 lbs	23.35 in.	12 in.
HGL81	1" x 8" Grinder	Clockwise	13.6 lbs	19 in.	12 in.
HGL80-L	1" x 8" Grinder	Counter Clockwise	13.6 lbs	23.25 in.	12 in.
HGL81-L	1" x 8" Grinder	Counter Clockwise	13.6 lbs	19 in.	12 in.
HGL61	Standard Bull Nose Grinder	Counter Clockwise	9.6 lbs	19 in.	10 in.

Accessories

Model	Part Number	Description
HGL61	30872	Bull Nose Grinder Stone

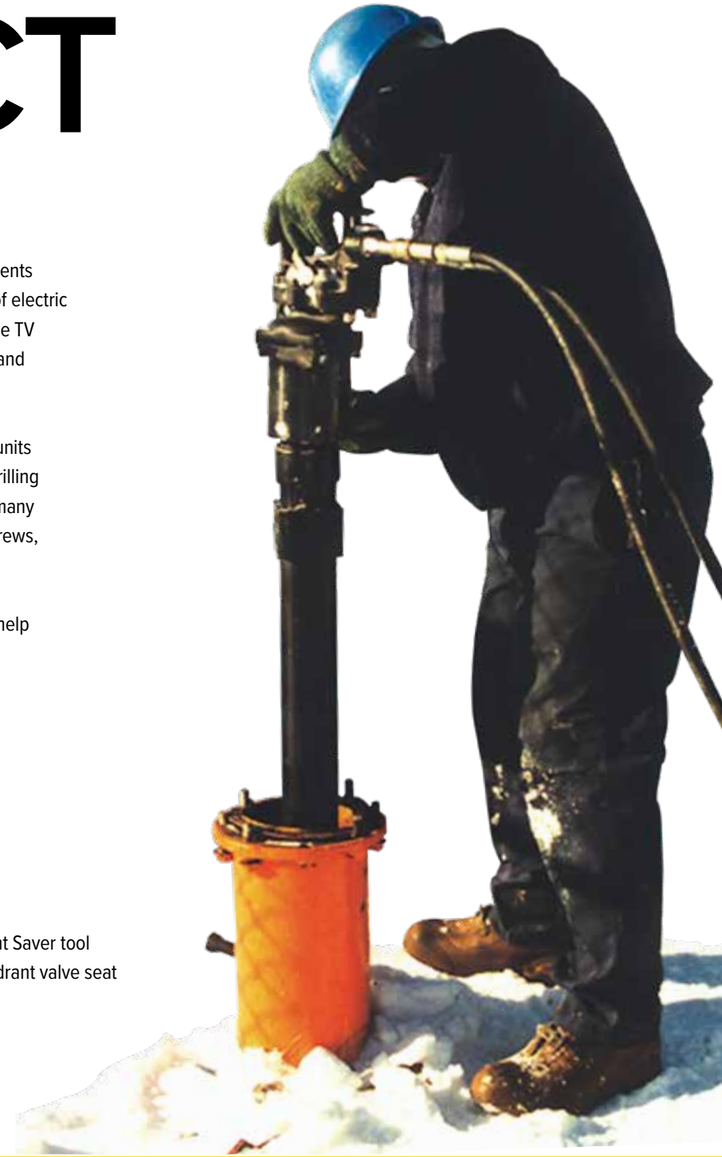
Model	Part Number	Description
HGL80	28598	1" x 8" Horizontal Grinding Stone

WORLDWIDE IMPACT

We provide tools to municipalities, water districts, governments and private contractors for construction and maintenance of electric power, telephone service, gas, water, wastewater, and cable TV distribution. And to transportation entities for construction and maintenance of streets, roads, highways and railways.

Utility trucks with hydraulic tool circuits or compact power units meeting HTMA standards can operate tools for breaking, drilling and cutting of pavement, railroad cutting and drilling, and many other day-to-day tasks performed by utility workers, road crews, and railway crews.

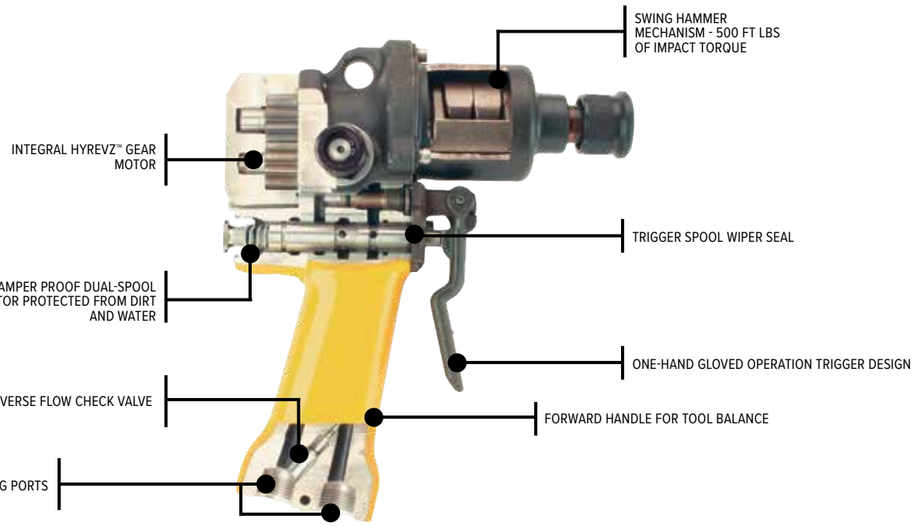
Our tools are used in cities and towns around the world to help build and maintain their infrastructures.



IW24 and Hydrant Saver tool removing fire hydrant valve seat

IMPACT DRILL Model ID07

The ID07 Impact Drill/Wrench delivers impact torque of up to 500 ft lbs (675 Nm). It is capable of breaking loose some of the toughest bolts and nuts. The ID07 can drive wood augers into the hardest salt-cured or creosote-treated ties without reaction torque to the operator.



Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Torque	Capacity	Misc.
ID07	ID07810	7.2 lbs / 3.3 kg	9 in. / 23 cm	5 in. / 11 cm	4-12 gpm / 15-45 lpm	750-2000 psi / 50-140 bar	2250 psi / 155 bar	500 ft lbs	7/16 in. QC Chuck	
	ID07815	7.2 lbs / 3.3 kg	9 in. / 23 cm	5 in. / 11 cm	4-12 gpm / 15-45 lpm	750-2000 psi / 50-140 bar	2250 psi / 155 bar	500 ft lbs	7/16 in. QC Chuck	Trigger Guard
	ID07820	7.2 lbs / 3.3 kg	9 in. / 23 cm	5 in. / 11 cm	4-12 gpm / 15-45 lpm	750-2000 psi / 50-140 bar	2250 psi / 155 bar	500 ft lbs	1/2 in. Square Drive	Pin Retainer
	ID07830	7.2 lbs / 3.3 kg	9 in. / 23 cm	5 in. / 11 cm	4-12 gpm / 15-45 lpm	750-2000 psi / 50-140 bar	2250 psi / 155 bar	500 ft lbs	1/2 in. Square Drive	Friction Ring
	ID0782001	7.2 lbs / 3.3 kg	9 in. / 23 cm	5 in. / 11 cm	4-12 gpm / 15-45 lpm	750-2000 psi / 50-140 bar	2250 psi / 155 bar	500 ft lbs	1/2 in. Square Drive	CE

STANLEY Infrastructure

DRILL MODEL DL07

The DL07 is a variable speed drill with reverse capability. It features a 1/2 inch keyed chuck, dual position assist handle, dual-spool for open center or closed center operation, trigger guard, and is powered by an integral Hyrevz™ motor. A reverse-flow check valve prevents operation if tool is plumbed backwards. The DL07 is furnished with flush face quick disconnect couplers.

SPECIFICATIONS

Application: Drilling holes in wood, metal, masonry and fiberglass.
Capacity: 1/2 in. Chuck
RPM: 350-1250
Hyd. Flow: 3-10 gpm / 11-38 lpm
Weight: 6 lbs / 2.7 kg
Length: 9 in. / 23 cm
Width: 4 in. / 10 cm
Connection: 3/8 in. flush face quick disconnect couplers

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Torque	Capacity	Misc.
DL07	DL0755201	6 lbs / 2.7 kg	9 in. / 23 cm	4 in. / 10 cm	3-10 gpm / 11-38 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	350-1250 rpm	1/2 in. / 12 mm Chuck	Dual Spool CE

Accessories

Model	Part No.	Description
ID07	05079	Chuck Adapter, 1/2 in. sq. x 7/16 in. Hex QC
	05109	Impact Socket, 9/16 in., 8 pt Deep Well
	05110	Impact Socket, 5/8 in., 8 pt Deep Well
	05111	Impact Socket; 11/16 in., 8 pt Deep Well
	05112	Impact Socket, 3/4 in., 8 pt Deep Well
	05113	Impact Socket, 13/16 in., 8 pt Deep Well
	05114	Impact Socket, 7/8 in., 8 pt Deep Well
	05115	Impact Socket, 15/16 in., 8 pt Deep Well
	05116	Impact Socket, 1 in., 8 pt Deep Well
	33155	Lineman's Socket, 13/16 * 15/16 in.
	33156	Lineman's Socket, 1 & 1-5/8 in.
	05080	Adapter, 5/8 in. Hex x 1/2 in. Square Drive
	05117	Adapter, 7/16 in. Hex Male x 1/2 in. Square Drive
	07192	Adapter, 1/2 in. Square Drive to 5/8 in. QC
	27845	Pole Bit, 5/8 in. Hex Shank, 9/16 x 8 x 22 in.
	27847	Pole Bit, 5/8 in. Hex Shank, 13/16 x 8 x 22 in.

Model	Part No.	Description
7/16 Hex Shank Pole Bits		
ID07	27850	9/16 x 8 x 12, 7/16 in. Hex
	27851	11/16 x 8 x 12, 7/16 in. Hex
	27852	13/16 x 8 x 12, 7/16 in. Hex
	27853	15/16 x 8 x 12, 7/16 in. Hex
	27854	1-1/16 x 8 x 12, 7/16 in. Hex
	27855	9/16 x 12 x 16, 7/16 in. Hex
	27856	11/16 x 12 x 16, 7/16 in. Hex
	27857	13/16 x 12 x 16, 7/16 in. Hex
	27858	15/16 x 12 x 16, 7/16 in. Hex
	27859	1-1/16 x 12 x 16, 7/16 in. Hex
	27860	9/16 x 18 x 22, 7/16 in. Hex
	27861	11/16 x 18 x 22, 7/16 in. Hex
	27862	13/16 x 18 x 22, 7/16 in. Hex
	27863	15/16 x 18 x 22, 7/16 in. Hex
	27864	1-1/16 x 18 x 22, 7/16 in. Hex
	27865	7/16 in. Hex Pole Bit 11/16 x 33 x 36 in.
	27869	7/16 in. Hex Pole bit 13/16 x 45 x 48 in.
DL07	09624	1/2 in. Chuck with Key
	27628	5/8 in. Chuck with Key

HANDHELD TOOLS

IMPACT WRENCHES

STANLEY Infrastructure

IMPACT WRENCH MODEL IW12

FEATURES
- Adjustable impact intensity, from 250 to 1200 ft. lb. / 340 to 1632 Nm
- Swing Hammer Mechanism
- Feathering trigger
- Reversing valve for instant change over from forward to reverse
- 3/4 inch square drive
- With or without a trigger guard

IMPACT WRENCH MODEL IW16

FEATURES
- Adjustable impact intensity, from 500 to 2500 ft. lb. / 680 to 3400 Nm
- Swing Hammer Mechanism
- Feathering trigger and “D” handle
- Reversing valve for instant change over from forward to reverse
- 1 inch square drive

IMPACT WRENCH MODEL IW24

FEATURES
- Adjustable impact intensity, from 800 to 3500 ft. lbs. / 1088 to 4760 Nm
- Swing Hammer Mechanism
- “D” handle
- Feathering trigger
- Reversing valve for instant change over from forward to reverse
- 1-1/2 inch square drive

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Torque	Capacity	Misc.
IW12	IW12140	14 lbs / 6.4 kg	9 in. / 24 cm	4 in. / 10 cm	4-12 gpm / 15-45 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	250-1200 ft lbs	3/4 in. Square Drive	-
	IW1214001	14 lbs / 6.4 kg	9 in. / 24 cm	4 in. / 10 cm	4-12 gpm / 15-45 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	250-1200 ft lbs	3/4 in. Square Drive	CE
IW16	IW16150	26 lbs / 12 kg	14 in. / 37 cm	5 in. / 11 cm	7-12gpm / 26-45 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	500-2500 ft lbs	1 in. Square Drive	CE
IW24	IW24160	43 lbs / 20 kg	16 in. / 41 cm	5 in. / 13 cm	7-12gpm / 26-45 lpm	1800-2000 psi / 124-140 bar	2250 psi / 155 bar	800-3500 ft lbs	1-1/2 in. Square Drive	-

Accessories

Model	Part No.	Description
IW12	01857	Adjustable Chuck & Adapter

STANLEY Infrastructure

HYDRANT SAVER

The Hydrant Saver can be powered by the IW24 Impact Wrench to safely remove fire hydrant valve seats - even those that have seized due to lack of periodic maintenance. The Hydrant Saver allows servicing of hydrants obstructed by walls, fences, buildings, etc. that previously had to be replaced.

Two complete kits available: Northern Kit with 8 ft. power tube and the Southern Kit with a 6-1/2 ft. power tube. Both kits include a 1-1/2 ft. extension, alignment wrench, retaining pins, and a Mueller 5-1/4 in. socket. A complete selection of sockets is available from STANLEY Infrastructure to fit the most commonly found hydrants.

Model	Part No.	Description
Hydrant Saver	31043	Hydrant Saver, Northern Kit, 8 ft power tube, 1-1/2 ft extension, seat alignment starter wrench, Mueller 5-1/4 in. Socket , plus pins
	31044	Hydrant Saver, Southern Kit, 6-1/2 ft power tube, 1-1/2 ft extension, seat alignment starter wrench, Mueller 5-1/4 in. socket plus pins

Accessories

Model	Part No.	Description
Hydrant Saver	30716	Power Tube, 8 ft.
	30717	Power Tube, 6-1/2 ft
	30718	Extension, 1-1/2 ft for Power Tube
	30719	Extension, 3 ft for Power Tube
	30720	Extension, 4 ft for Power Tube
	30721	Wrench, Seat Alignment Starter
	30722	Socket, 4-1/4 in. Mueller, M&H, Smith, Columbia
	30723	Socket, 5-1/4 in. Mueller, M&H, Smith, Columbia
	30724	Socket, 5-1/4 in. Waterous
	30725	Socket, 4-1/4 in. Waterous
	30726	Socket, 5-1/4 in. Kennedy
	30727	Socket, 4-1/4 in. Kennedy
	30728	Socket, 5-1/4 in. Clow
	30729	Socket, 4-1/4 in. Clow
	31045	Pin for Sockets
	73342	East Jordan Socket 4-1/4 in.
	73343	East Jordan Socket 5-1/4 in.
	73367	American Darling Socket 73 - 5

HAMMER DRILLS

HAMMER DRILL MODEL HD01

The HD01 is ideal for just about any drilling job whether in rock, concrete, wood or masonry, with 4200 bpm and 800 rpm. The hammer function can be turned off for efficient light drilling in wood and metal. The sturdy, light-weight construction features a D-handle and assist handle making it easier to maneuver than a pistol-grip tool. The HD01 chuck accepts SDS Plus bits and accepts other common accessories with a standard SDS Plus shank. A geared drill chuck and adapter are available for use with common wood auger bits or twist drills. The HD01 has 3 modes of operation--drill mode (without percussion), hammer drill mode (drill with percussion) or hammer only mode (percussion only).

HAMMER DRILL MODEL HD45

The HD45 is designed for drilling holes in concrete, rock, or masonry from 3/4 in. / 19 mm to 2 in. / 50 mm in diameter and up to 29 in. / 73.7 cm deep as well as core drilling up to 4 in. / 102 mm in diameter. The HD45 uses a Skil 736 shank, carbide tipped, fluted drill bits and requires no fluid or compressed air to clear holes during operation. The HD45 features a feathering trigger for easy starts, adjustable rotation speed (both forward and reverse), and is furnished with hose whips and flush face quick disconnect couplers.

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Performance	Capacity	Misc.
HD01	HD01531	8.4 lbs / 4.1 kg	14.1 in. / 36 cm	5.6 in. / 14 cm	3-9 gpm / 11-34 lpm	750-2000 psi / 50-140 bar	2250 psi / 155 bar	800 rpm @ 6 gpm	7/8 in. Dia.	SDS Plus Shk
	HD0153101	8.4 lbs / 4.1 kg	14.1 in. / 36 cm	5.6 in. / 14 cm	3-9 gpm / 11-34 lpm	750-2000 psi / 50-140 bar	2250 psi / 155 bar	800 rpm @ 6 gpm	7/8 in. Dia.	SDS Plus Shk; CE
HD45	HD45110B	45 lbs / 20 kg	22 in. / 57 cm	14 in. / 35 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	300 rpm	#736 Skil Hex	-
	HD4511001	45 lbs / 20 kg	22 in. / 57 cm	14 in. / 35 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	300 rpm	#736 Skil Hex	CE

Accessories

Model	Part No.	Description
HD01	72992	1/2 in. Friction Chuck Adapter
Carbide Bits		
HD01	27807	3/8 x 12 in. OAL
	27814	1/2 x 12 in. OAL
	27826	3/4 x 12 in. OAL
	27827	3/4 x 18 in. OAL
	27832	7/8 x 18 in. OAL

Model	Part No.	Description
HD45	27902	Percussion Core Bit 2-1/2 in. dia. x 6 in. OAL
	27904	Percussion Core Bit 3 in. dia. x 6 in. OAL
	30279	HD45 (Skil 736) Adapter (required)
Carbide Bits		
HD45	02280	3/4 x 24 in.
	02281	1 x 24 in.
	02282	1-1/4 x 24 in.
	02283	2 x 24 in.
	04668	1 x 18 in.
	04896	1-1/4 x 36 in.
	05163	7/8 x 24 in.
	05167	1-1/2 x 24 in.

SINKER DRILLS

SINKER DRILL MODEL SK58

The SK58 is designed for blast hole drilling, leak detection for gas utilities, and dowel hole drilling up to 3 inches / 7.6 cm in diameter and 20 feet / 6 m deep. The sinker drill uses air or water flushing (model dependent) to clear holes of debris. The sinker drill features a feathering trigger for easy starts, a direct drive rotation motor adjustable from 0 to 300 rpm, and is furnished with hose whips and flush faced quick disconnect couplers.

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Performance	Capacity	Misc.
SK47	SK47130	52 lbs / 24 kg	23 in. / 58 cm	14 in. / 36 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	10 ft Hole	7/8 in. x 4-1/4in. Hex Shank	Air
SK58	SK58110	67 lbs / 30 kg	26 in. / 66 cm	18 in. / 46 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	20 ft Hole	1 in. x 4-1/4 in. Hex Shank	Air
	SK58120	67 lbs / 30 kg	26 in. / 66 cm	18 in. / 46 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	20 ft Hole	1 in. x 4-1/4 in. Hex Shank	Water
	SK58130	67 lbs / 30 kg	26 in. / 66 cm	18 in. / 46 cm	7-9 gpm / 26-34 lpm	1500-2000 psi / 105-140 bar	2250 psi / 155 bar	20 ft Hole	7/8 in. x 4-1/4 in. Hex Shank	Air

Accessories

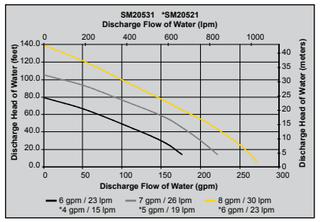
Model	Part No.	Description
SK47/SK58	04914	Carbide Rock Bits for use with air (also requires drill steel) - 2 in. dia. H thread
	05174	Drill Steels for use with air - 7/8 x 4-1/4 in. H thread, 24 in. U/C
	05177	Carbide Rock Bits for use with air (also requires drill steel) - 1-3/8 in. dia. H thread CLOSEOUT
	05178	Carbide Rock Bits for use with air (also requires drill steel) - 1-1/2 in. dia. H threadC

Model	Part No.	Description
SK58	04915	Drill Steels for use with water 1 x 4-1/4 in. H thread, 36 in. U/C
	05170	Drill Steels for use with air - 1 x 4-1/4 in. H thread, 24 in. U/C
	05171	Drill Steels for use with air - 1 x 4-1/4 in. H thread, 48 in. U/C

SUMP PUMPS

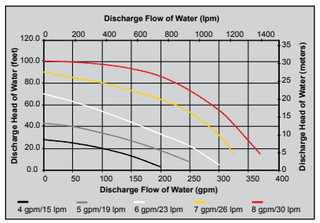
SUMP PUMP MODEL SM20

The SM20 is one of the lightest and most durable pumps available. Completely submersible and pumping 250 gpm / 946 lpm at a 10-foot head and moving solids up to 5/16 of an inch makes it ideal for vaults and manholes. It features a cast aluminum inlet, steel or urethane impeller, Hyrevz™ motor, and is furnished with flush face quick disconnect couplers.



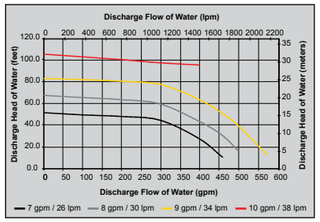
SUMP PUMP MODEL SM21

The SM21 is the ideal pump for areas of confined space and small openings. The SM21 pumps up to 300 gpm / 1125 lpm at a 50-foot head. The cast iron impeller is within 3/4 of an inch of the base allowing the pump to remove more liquids than other pumps. The SM21 features a lifting eye, 2.5 in. NPTF discharge, and is furnished with hose whips and flush face quick disconnect couplers.



SUMP PUMP MODEL SM21

The SM50 can pump an impressive 500 gallons per minute / 30,000 gallons per hour. It is completely submersible, can draw water down to a depth of 3.5 inches, and can run dry. It features a cast aluminum inlet, stainless steel impeller, lifting eye, 3 inch Camlock male discharge, and is furnished with flush face quick disconnect couplers.



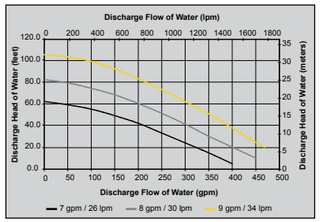
Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Output	Discharge	Impeller
SM20	SM2043101	18 lbs / 8.16 kg	7.5 in. / 19 cm	9.6 in. / 24 cm	4-9 gpm / 15-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	250 gpm / 946 lpm	2.5 in. / 63.5 mm	Steel
	SM2052101	18 lbs / 8.16 kg	7.5 in. / 19 cm	9.6 in. / 24 cm	4-6 gpm / 15-23 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	250 gpm / 946 lpm	2.5 in. / 63.5 mm	Urethane
	SM2053101	18 lbs / 8.16 kg	7.5 in. / 19 cm	9.6 in. / 24 cm	4-9 gpm / 15-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	250 gpm / 946 lpm	2.5 in. / 63.5 mm	Urethane
SM21	SM2151101	25 lbs / 11.34 kg	16 in. / 40.6 cm	6.25 in. / 15.9 cm	4-9 gpm / 15-34 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	300 gpm / 1125 lpm	2.5 in. / 63.5 mm	Steel
SM50	SM50100	21 lbs / 9.5 kg	10.5 in. / 26.7 cm	10 in. / 25.4 cm	7-12 gpm / 26-45 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	500 gpm / 1890 lpm	3 in. / 75 mm	Steel

TRASH PUMPS & VENT FAN

STANLEY Infrastructure

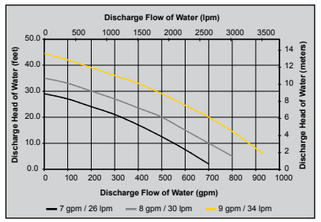
TRASH PUMP MODEL TP03

The TP03 is a submersible trash pump and will pump liquids with concentrations of solids up to 25% by volume. It features a tough urethane bowl and impeller, lifting eye, removable top plate, 3 inch NPTF discharge, and flush face quick disconnect couplers.



TRASH PUMP MODEL TP08

The TP08 is a heavy duty submersible trash pump capable of pumping high volumes of water, sand slurries, gravel, sludge and solids up to 4 inches in diameter. It features a steel bowl, cast iron impeller, polyethylene wear plates, carrying handle, removable top plate, 4 inch male Camlock discharge, and flush face quick disconnect couplers.



Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Output	Discharge	Impeller
TP03	TP0300301	32 lbs / 14.52 kg	14 in. / 35.5 cm	12 in. / 30.4 cm	7-9 gpm / 26-34 lpm	2000 psi / 140 bar	2250 psi / 155 bar	450 gpm / 1688 lpm	3 in. / 75 mm	Urethane
TP08	TP08013	65 lbs / 29.48 kg	19 in. / 48.3 cm	15 in. / 38 cm	7-9 gpm / 26-34 lpm	2000 psi / 140 bar	2250 psi / 155 bar	800 gpm / 3028 lpm	4 in. / 100 mm	Steel

Accessories

Model	Part No.	Description
SM20/SM21/SM50	02183	Fire Hose, 25 in. x 2-1/2 in.
	02317	Fire Nozzle - 1 in. output
	05133	2-1/2 in. Thread Adapter for Sump Pump to Fire Hose
	05134	50 ft. Fire Hose, 2-1/2 in. dia.
	05135	Spanner Wrench for Pin Lug Coupler
	15248	Adapter, 3 in. female camlock x male fire hose (nh) thread
	59101	Adapter, 2-1/2 in. male NPT x 3 in. male Camlock
SM20/SM21/SM50	56761	Discharge Hose
	52720	3 in. Adapter
	02812	Elbow
TP03	52720	Adapter, 3 in. male NPT x 3 in. male Camlock
	56761	Lay-Flat Discharge Hose, 3 in. x 25 ft with Camlock fittings
TP08	65624	Lay-Flat Discharge Hose, 4 in. x 25 ft with Camlock Fittings

VENT FAN MODEL VF80

FEATURES

- Designed for heavy duty service
- Quiet operation
- Centrifugal blower to deliver large volume of air
- High impact plastic case
- Standard 8 inch / 20 cm discharge
- Accepts standard heaters and coolers
- Hyrevz™ motor

Model	Part No.	Weight	Length	Width	Flow Range	Working Pressure	Full Relief Setting	Capacity
VF80	VF8000	19 lbs / 8.6 kg	15 in. / 40 cm	19 in. / 49 cm	4-12 gpm / 15-45 lpm	1000-2000 psi / 70-140 bar	2250 psi / 155 bar	1700 scfm / 802 lsec

Model	Part No.	Description
VF80	04430	Flexible Exhaust Hose

LIGHTER THAN AIR

Powering hydraulic tools doesn't require a large pull-behind power source like an air compressor. The fact is, a power supply about the size of a wheelbarrow, such as our HP28 Power Unit, is more than sufficient to operate any tool shown in this catalog from our biggest breakers to our smallest drills.

Our hydraulic power units use the latest in commercial engine technology from manufacturers such as Briggs & Stratton and Honda. These engines are air cooled, fuel efficient, light weight, rugged, and pack plenty of power to operate our most demanding tools without over-taxing the engine.

Check out the advantages of hydraulic power units over other types of equipment such as air compressors or engine driven tools:

- Versatile - dozens of tools can be operated from these power units
- Air cooled - no winter freezing considerations
- Fuel efficient - 1.3 gallons per hour / 4 liters per hour estimated fuel consumption
- Quiet operation
- Lightweight - 149 to 360 lbs / 68 to 163 kg
- Small size - can fit into small truck or van
- Portable - can be wheeled around job site like a wheelbarrow
- Serviceability - can be serviced by small engine dealers

POWER UNIT MODEL HP28 (TWIN 8)

The New HP28 (TWIN8) twin circuit hydraulic power unit offers a revolutionary design capable of operating two tools at 8 gpm simultaneously. For the first time running two hydraulic tools at full 8 gpm capacity is a reality, increasing productivity and versatility like never before. Experience how the HP28 will change the way hydraulic tools are used and **JOIN THE REVOLUTION!**

Each of the two circuits is optimized to deliver ideal flows and pressures to both Type 1 and Type 2 hydraulic tools.

FEATURES

- **ATM Technology**
  Active Thermal Management (ATM) optimizes performance in extreme weather conditions. By managing oil temperatures, preheat time is decreased and tool runtime increases.
- **Side Handles**
  New side handles improve ease of lifting the unit while adding side impact protection and with no moving parts to wear or corrode.
- **Solid Tires**
  Eliminates the need to refill flat tires and decreases pull force needed for maneuvering.
- **Recessed Control Panel**
  Protects dashboard and couplers.
- **Tough Grip Multi Position Handle**
  Special Tough Grip handle surface improves comfort and control with increased durability.
- **Lifting Hook**
  Flush face design protects the lifting hook from accidental job abuse.
- **Auto Choke**
  Allows for quick and easy starting of the power unit.

The HP series hydraulic power units are engineered for continuous professional use and are optimized to deliver ideal flows and pressures to both Type 1 and Type 2 hydraulic tools. Their powerful Briggs & Stratton engines and best-in-class cooling system delivers the power and heat rejection pros need to keep tools working uninterrupted all day in all types of conditions. The HP series of power units feature a manual throttle for ultimate user control.

POWER UNIT MODEL HP8

FEATURES

- Meets HTMA requirements for Type 1 and Type 2 hydraulic tool circuits.
- 5 or 8 gpm / 20 or 30 lpm @ 2000 psi
- Heat rejection capacity exceeding 5 hp.
- Quartz hour meter
- Direct mounted hydraulic pump
- Air-oil cooler
- Lift and latch handle
- Pneumatic tires
- Maintenance-free battery
- Hydraulic and engine oil filter
- Engine oil level shut-down
- 5 gallon / 20 liters fuel capacity

POWER UNIT MODEL HP12

SPECIFICATIONS

Application: Heavy-duty continuous use hydraulic power supply for both Type 2 & Type 3 tools
Capacity: 8, 10, or 12 gpm / 30, 37.5, or 45 lpm
Pressure: 2000 psi / 140 bar
Weight: 340 lbs / 154 kg
Length: 35 in. / 90 cm
Width: 21.5 in. / 54.6 cm
Height: 29 in. / 73.7 cm
Engine: Briggs & Stratton 23 hp Vanguard
Connection: 3/8 in. flush face quick disconnect couplers
Heat Rejection: Up to 5 hp

FEATURES

- Meets HTMA requirements for Type 2 and Type 3 hydraulic tool circuits.
- 8, 10, or 12 gpm / 30, 37.5, or 45 lpm @ 2000 psi
- Heat rejection capacity exceeding 5 hp.
- Quartz hour meter
- Direct mounted hydraulic pump
- Air-oil cooler
- Lift and latch handle
- Pneumatic tires
- Maintenance-free battery
- Hydraulic and engine oil filter
- Engine oil level shut-down,
- 5 gallon / 20 liters fuel capacity

POWER UNIT MODEL HP210

The Hydraulic power to operate two 5 GPM tools at once. Stanley's HP210 compact design is ideal for all your on-site hydraulic power needs. The ultra efficient hydraulic tool circuit cooling provides comfortable tool operation even in the most demanding environments.

SPECIFICATIONS

Weight: 330 lbs / 150 kg
Length: 35 in. / 90 cm
Width: 23 in. / 59 cm
Height: 29 in. / 74 mm
Pressure: 2000 psi / 140 bar
Fuel Capacity: 5.5 gal. / 24 liter

FEATURES

- Compact and lightweight.
- In-tank hydraulic filtration.
- Pressurized engine oil lubrication.
- Locking handle.
- Electric Start.

TRACHORSE

TracHorse MODEL MHP3

The TracHorse is an all-terrain, self-propelled mobile hydraulic power pack that allows transportation of tools and equipment in most job site environments. Simple operating controls allow for maneuvering in a wide range of applications. The auxiliary hydraulic tool circuit is designed for continuous-duty applications and features the standard high-efficiency cooling found on all STANLEY hydraulic power units.

SPECIFICATIONS

Load Capacity: 1000 lbs / 454 kg
Travel Speed: Low Speed - 1.55 mph / 2.5 km/h
High Speed - 2.8 mph / 4.5 km/h
Weight: 1200 lbs / 544 kg
Length: 78 inches / 198 cm
Width: 36 inches / 92 cm
Height: 43 inches / 109 cm
Pressure: 2000 psi / 38 bar
Flow Range: Twin Circuit - 2 @ 5 gpm / 20 lpm or 1 @ 10 gpm / 38 lpm
Connect Size & Type: Flush-Face Couplers
Fuel Capacity: 5 gallons / 20 liters
Engine: Honda 20 hp OHV

FEATURES

- Self-propelled mobile hydraulic tool and equipment carrier that transports tools and equipment in most job-site environments
- Simple operating controls allow for a wide range of applications
- Two speed track drive
- Work lights
- Opening tailgate
- Auxiliary hydraulic tool circuit is designed for continuous-duty applications and features the standard high-efficiency cooling found on all STANLEY hydraulic power units
- Climbs 60% grade
- Carries 1,000 lbs / 454 kg

STANLEY Infrastructure

Model	Part No.	Weight	Length	Width	Height	Engine	Output Flow	Pressure	Misc.
HP8	HP8BA	330 lbs / 150 kg	36 in. / 91 cm	23 in. / 59 cm	29 in. / 74 cm	Briggs	5gpm/20lpm **to** 8gpm/30lpm	2000 psi / 140 bar	CE
	HP8BD	330 lbs / 150 kg	36 in. / 91 cm	23 in. / 59 cm	29 in. / 74 cm	Briggs	5gpm/20lpm **to** 8gpm/30lpm	2000 psi / 140 bar	12VDC accessory
HP12	HP12B	340 lbs / 154 kg	35 in. / 91 cm	23 in. / 59 cm	29 in. / 74 cm	Briggs	8gpm/30lpm **to** 12gpm/50lpm	2000 psi / 140 bar	
HP210	HP210B	330 lbs / 150 kg	35 in. / 90 cm	23 in. / 59 cm	29 in. / 74 cm	Briggs	Single Circuit (1ea) 5gpm/20lpm or Dual Circuit (2ea) 5gpm/20lpm or Single Circuit (1ea) 10gpm/40lpm	2000 psi / 140 bar	
	HP210BK	330 lbs / 150 kg	35 in. / 90 cm	23 in. / 59 cm	29 in. / 74 cm	Briggs	Single Circuit (1ea) 5gpm/20lpm or Dual Circuit (2ea) 5gpm/20lpm or Single Circuit (1ea) 10gpm/40lpm	2000 psi / 140 bar	Skid Mount
HP28	HP28B02	360 lbs / 163 kg	37.5 in. / 95.3 cm	25.75 in. / 65.4 cm	30 in. / 75.2 cm	Briggs	2 @ 8 gpm	2000 psi / 140 bar	Twin Circuit
	HP28B02	360 lbs / 163 kg	37.5 in. / 95.3 cm	25.75 in. / 65.4 cm	30 in. / 75.2 cm	Briggs	2 @ 8 gpm	2000 psi / 140 bar	Twin Circuit Asia Model
TracHorse	MHP32242100	1200 lbs / 544 kg	78 in. / 198 cm	36 in. / 92 cm	43 in. / 109 cm	Honda	2 @ 5 gpm or 1 @ 10 gpm	2000 psi / 140 bar	Twin Circuit Auto Throttle
	MHP32232100	980 lbs / 445 kg	78 in. / 198 cm	36 in. / 92 cm	43 in. / 109 cm	Honda	2 @ 5 gpm or 1 @ 10 gpm	2000 psi / 140 bar	Bed Less

POWER UNIT ACCESSORIES

Model	Part No.	Description
HP8/HP12	13360	Hose Basket Conversion Kit
	33212	Weather Cover
	64940	Male Plug, 12 volt
	64942	12V Receptacle Accessory
	52722	High Altitude Carburetor Jet Kit - 8000 ft.
	52721	High Altitude Carburetor Jet Kit - 8600 ft.

ACCESSORIES

STANLEY Infrastructure

HYDRAULIC VALVES & FLOW CONTROLS

Part No.	Description
26542	9 gpm flow control, Brand Hydraulics, C-50-9
72264	In-line Valve, OC/CC

Part No.	Description
67259	Check Valve Assembly
67005	Tool Exchange Valve

HYDRAULIC HOSES

Part No.	Description
01412	Pigtail Hose Whip, 3/8 in. ID x 12 in., 3/8 in. male pipe, -6 SAE O-ring.
01652	Pigtail Hose Whip, 1/2 in. ID x 12 in., 3/8 male pipe, -8 SAE O-ring
31848	50 ft. x 1/2 in. ID wire braid, dual hose with couplers
31972	25 ft. x 1/2 in. ID wire braid, dual hose with couplers
44931	Rubber hose, non-conductive, 3/8 in. x 8 ft
47318	Rubber hose, non-conductive, 3/8 in. x 10 ft
56797	Rubber Hose Set, non-conductive, 3/8 in. x 10 ft, w/couplers
65897	Rubber Hose Set, non-conductive, 3/8 x 14 ft, w/o couplers

Part No.	Description
58633	Twinned Hose, 1/2 in. x 25 ft, wire braid, w/couplers
58634	Twinned Hose, 1/2 in. x 50 ft, wire braid, w/couplers
58973	Rubber Hose Set, non-conductive, 3/8 in. x 8 ft, w/couplers
65617	Rubber Hose Set, non-conductive, 3/8 in. x 10 ft, -8 male SAE x 3/8 NPTF Male
71170	Non-Conductive, twin-line bonded coiled hose, 3/8 in. NPT

QUICK DISCONNECT COUPLERS

Part No.	Description
03288	3/8 Cap & Plug for all flush face sets
03971	3/8 Parker Flush Face Set (3/8 NPT)
03974	Parker Flush Face Set (1/2 NPT)
02324	1/2 Cap & Plug

PLUMBING

Part No.	Description
00936	Adapter, 1/2 SAE to 3/8 in. male pipe

Part No.	Description
04192	Hex Nipple, 1/2 in. male pipe

TEST EQUIPMENT

Part No.	Description
02835	Accumulator Tester & Charger
04182	Flow and Pressure Tester

Part No.	Description
29085	Flow & Pressure Tester
31254	Accumulator Charging Kit (hand held tools only)

STANLEY Infrastructure

HYDRAULIC SYSTEM REQUIREMENTS

HTMA

Hydraulic systems come in many forms—from those found in the simple hydraulic jack to the more sophisticated systems found in earth moving equipment. The system required to operate most hydraulic tools found in this catalog would require 8 gpm / 30 lpm and be capable of providing system pressure up to 2000 psi / 140 bar. This system is referred to as a Type II, as classified by the Hydraulic Tool Manufacturers Association (HTMA). But there are also 3 other classifications. They are discussed below.

HYDRAULIC TOOL MANUFACTURERS' ASSOCIATION (HTMA) REQUIREMENTS

Hydraulic tools fall into 4 classifications, Type I, Type II, Type III, and Type RR as set by HTMA. The system requirements for powering these tools are as follows:

Type I	5	gpm ±10% / 19 lpm
Type II	8	gpm ±10% / 30 lpm
Type III	12	gpm ±10% / 45 lpm
Type RR	10	gpm ±10% / 38 lpm

OPERATING PRESSURE:

Hydraulic systems should be capable of providing the appropriate operating pressure and flow for the system types noted above when measured across the tool connections. Deviation from the nominal flow rates should be no more than plus or minus 10% at a operating pressure of 2000 psi / 138 bar. This is the pressure that the tools will normally operate at which is not to be confused with the relief pressure.

RELIEF PRESSURE:

Hydraulic systems should be capable of limiting the maximum pressure by using either a pressure compensating pump or a relief valve with a non-pressure compensating pump. The system pressure limiting component shall begin to control the maximum pressure at no less than 2150 psi. This is commonly known as the "cracking pressure". The system pressure limiting component shall limit the maximum pressure to 2250 psi for a Type I, Type II, or Type III tool. The system pressure limiting component shall limit the maximum pressure to 2500 psi for a Type RR tool.

RETURN PRESSURE:

The hydraulic systems should generate no more than 250 psi / 17 bar return pressure (back pressure) at the tool when operating at maximum flow for the tool type. System conditions for this pressure are at maximum hydraulic fluid viscosity of 400 SUS (SSU) at minimum operating temperature.

COOLING:

The hydraulic systems should have sufficient heat rejection capacity to limit maximum oil temperature to 140° F / 60° C at the maximum expected ambient temperature. Recommended minimum cooling capacities to dissipate tool-generated heat are:

Type I	3 Horsepower / 2.24 kW
Type II	5 Horsepower / 3.73 kW
Type III	7 Horsepower / 5.22 kW
Type RR	6 Horsepower / 5.22 kW

When determining cooling capacity, the intended duty cycle and the system generated heat must both be considered.

FILTRATION:

Systems should have 25 micron nominal filtration for the hydraulic fluid. Recommended filter element size is at least three times system rated flow to prevent filter bypass under low temperature start-up.

FLUID:

Hydraulic systems should use hydraulic fluid that has a viscosity of 130-225 SSU / 27-42 cst at l00° F / 38° C. Hydraulic fluids of petroleum base with anti wear properties and high viscosity indexes over 140 will meet recommended hydraulic fluid requirements over a wide range of operating temperatures. They should be demulsifying type to allow water to settle out of the fluid.

OPEN-CENTER AND CLOSED-CENTER SYSTEMS

There are two basic types of hydraulic systems — Open-Center and Closed-Center.

OPEN-CENTER IS CONSTANT FLOW — VARIABLE PRESSURE

When a tool valve is in the OFF position, hydraulic oil flows through the ON/OFF valve ports of the tool and back to the reservoir. The system is constantly flowing oil through the tool valve ports and back to the reservoir at no pressure. When the tool valve is ON, oil circulates through the tool causing the tool to operate, and then returns to the reservoir. Pressure is created when resistance to flow is sensed by the system. This occurs when the tool is put to work. Pressure will increase as the tool needs it up to the relief setting in the hydraulic system.

CLOSED-CENTER IS CONSTANT PRESSURE — VARIABLE FLOW

When a tool valve is in the OFF position, hydraulic oil flow stops at the ON/OFF valve port of the tool. The system will build and hold pressure without returning oil to the reservoir. When the tool valve is ON, oil circulates through the tool causing the tool to operate, and then returns to the reservoir. Pressure tends to be constant in the system. Pressure will increase as the tool needs it up to the settings in the hydraulic system. And if pressures higher than the system setting are demanded by the work, flow will decrease.

FLUID TEMPERATURE

The following information will serve to assist those installing hydraulics in mobile applications for hand held tools. While many hydraulic circuits can run upwards to 200° F / 93° C, temperatures over 110° F / 43° C are uncomfortable to human touch. Our desire is to hold oil temperature to a maximum of 140° F / 43° C.

In almost any hydraulic tool circuit, oil cooling methods will be required except for very short periods of operation or in underwater and extreme cold environments. If you are involved in the design of a hydraulic tool circuit, use the following as guidelines.

BASIC DON'TS FOR COOL OIL CONTROL

1. **DON'T** — Rely on a large reservoir to control oil heating. Large reservoirs, even with good air circulation, do not adequately dissipate heat.
2. **DON'T** — Set relief pressure too low (open-center circuits) for percussion type tools (breakers, hammer drills, etc.). Pressure peaks may run up to 350 PSI over gauge pressure, popping the relief and causing heat as well as low tool performance.
3. **DON'T** — Pump more oil than the tool should use and avoid flow controls if possible. Instead, size the pump for desired flow volume. Gear type flow dividers can be used to reduce flow more efficiently than valves, reducing heat.
4. **DON'T** — Use heavy oils such as 30W or 10W30 engine oils. These will cause resistance in lines and add to back pressure and heat.
5. **DON'T** — Run return oil through control valves or other circuit components, except coolers and return line filters.

DO THE FOLLOWING TO REDUCE HEAT GENERATION

1. Operate pumps at moderate speed — gear pumps usually generate less heat and are less prone to cavitation at speeds of 1,000-2,000 RPM.
2. Use generous line sizes — Especially on pump suction and return from tool to tank.
3. Use oils in 130-225 SSU at l00° F / 38° C range with high viscosity index. (see hydraulic fluid recommendations at the end of this section)

PROVIDE GOOD COOLING FOR HYDRAULIC OIL

1. Use an air-to-oil cooler of maximum size for space available. Use a shrouded, high capacity fan. Many vehicles do not cool well when parked with engine at low speed. Do NOT use a "thermal" viscous-drive fan because these fans do not draw air unless the engine is hot.

FLOW CONTROLS

1. General Notes — To reduce or control flow rate through STANLEY Tools, flow control valves are sometimes necessary. All possible effort should be made to avoid use of flow control valves where appropriate pump volume can be used because:
   - **A.** Excess oil volume and subsequent pressure drop generates heat.
   - **B.** When percussion type tools that generate pressure pulses are used, flow controls may oscillate and cause flow changes which reduce tool performance and add increased heating.
2. Flow Control of Open-Center Circuits — Always use a priority type pressure-compensated flow control. This will prevent relief popping and reduce heat build-up. The excess flow should be routed in an unrestricted manner to the reservoir.
3. Flow Control of Closed-Center Circuits — Use a two-port, pressure-compensated flow control. Some of these are very compact, in the range of 1-1/4" diameter by 5" long, and can be attached to the tool pressure pigtail. Do not use priority type controls on closed-center circuits, as this will cause the pump to operate at full volume — further heating the oil.

QUICK DISCONNECTS

1. Only use quick disconnects matching hose diameters. i.e. 1/2 inch port quick disconnect for 1/2 inch inside diameter hose.
2. Use as few quick disconnects as possible and avoid using adapter fittings with quick disconnects. Fittings and quick disconnects, while necessary, create flow restriction which causes heat and reduced tool performance.
3. Always use HTMA recommended quick disconnects that are flush-faced and drip less.

HOSE TYPES

The rated working pressure of the hydraulic hose must be equal to or higher than the relief valve setting on the hydraulic system. There are three types of hydraulic hose that meet this requirement and are authorized for use with STANLEY Hydraulic Tools. They are:

- Certified non-conductive - constructed of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. Hose labeled certified non-conductive is the only hose authorized for use near electrical conductors.
- Wire-braided (conductive) - constructed of synthetic rubber inner tube, single or double wire braid reinforcement, and weather resistant synthetic rubber cover. This hose is conductive and must never be used near electrical conductors.
- Fabric-braided (not certified or labeled non-conductive) - constructed of thermoplastic or synthetic rubber inner tube, synthetic fiber braid reinforcement, and weather resistant thermoplastic or synthetic rubber cover. This hose is not certified non-conductive and must never be used near electrical conductors.

TOOL TO CIRCUIT HOSE RECOMMENDATIONS

Oil Flow		Each Hose Length		Inside Diameter		USE	Wire Braid Hose Spec	Working Pressure		Fiber Braid Hose Spec	Operating Pressure	
GPM	LPM	FEET	METERS	INCH	MM			PSI	BAR		PSI	BAR
5-8	19-30	up to 50	up to 15	1/2	13	Both	SAE 100R17-8	3000	230	SAE 100R7-8	2000	140
5-8	19-30	51-100	15-30	5/8	16	Both	SAE 100R17-10	3000	230	SAE 100R8-10	2750	190
5-8	19-30	100-300	30-90	5/8	16	Pressure	SAE 100R2-10	2750	190	SAE 100R8-10	2750	190
				3/4	19	Return	SAE 100R1-12	1250	86	SAE 100R7-12	1250	86

NOTE: SAE 100R16 may be used in place of SAE 100R2

RECOMMENDED HOSE CONFIGURATIONS

When a longer hose configuration is used by connecting hoses together, system back pressure is increased. Too high a back pressure may reduce performance and life of the tool. STANLEY recommends back pressure not to exceed 250 psi / 17 bar. In addition, oil temperature should be limited to 140 degrees F / 60 degrees C.

For both 5 and 8 gpm (20 - 30 lpm) tools, standard hose with a 1/2" inside diameter is acceptable to use up to 100' or 30 m when configured with **(2) sets of 50 feet hose.**

STANLEY **does not** recommend the following configurations with 1/2" diameter hose.

- (4) sets of 25' hose
- (1) set of 50' hose + (2) sets of 25' hose

These configuration will drive back pressure beyond recommended levels. For longer lengths between 100' to 300' STANLEY recommends increasing the hose diameters to the following:

Pressure Line - 5/8" Inside Diameter Hose

Return Line - 3/4" Inside Diameter Hose

The increased hose diameter will alleviate back pressure and allow proper tool operation.

PERFORMANCE NOTES

When operating with longer hose lengths with the same diameter hose, back pressure increases. When operating hydraulic tools at 100' with the 1/2" diameter hose, some decrease in performance is possible.

This should not noticeably affect overall performance of the tool, but note it is not under optimal conditions with longer hose configurations.

RECOMMENDED HYDRAULIC FLUIDS

STANLEY Infrastructure

FLUIDS FOR MOBILE HYDRAULIC TOOL CIRCUITS

The specification listed here will provide good all season operation if your circuit is of proper design and normal maintenance is performed. (Periodic filter change, draining of condensate, etc.)

SPECIFICATIONS

Item	U.S.A.	Metric
Viscosity (Fluid Thickness)	50° F 450 SSU Max.	10° C 95 Centistokes Max.
Viscosity (Fluid Thickness)	100° F 130-225 SSU	38° C 27-42 Centistokes
Viscosity (Fluid Thickness)	140° F 85 SSE Min.	60° C 16.5 Centistokes Min.
Pour Point (Min.for cold startup)	-10° F	23° C
Viscosity Index	(ASTM D2220)	140 Minimum
Demulsibility	(ASTM D1401)	30 Minutes Max.
Flash Point	(ASTM D92)	340° F Min.
Rust Inhibition	(ASTM D665 A&B)	Pass
Oxidation	(ASTM D943)	1000 Hours Min.
Pump Wear Test	(ASTM D2882)	60 mg Max.
Biodegradability	CEC-L-33-A94	>60%

RECOMMENDED FLUIDS

The fluids listed here work well over a wide temperature range at start-up, allow moisture to settle out, and resist biological growth likely in cool-operating hydraulic circuits. These fluids are recommended by STANLEY Hydraulic Tools for use in our tools. Other fluids that meet or exceed the specifications of these fluids may also be used. Biodegradable fluids listed are compatible with all tool seals and hoses.

RECOMMENDED FLUIDS

Brand	Biodegradable	Description
CITGO	No	Hydurance All Temp
AMS Oil	No	HVH 32
Exxon Mobil	No	Univis HVI26*
Exxon Mobil	No	DTE 10 Excel
Shell	No	S2 V 32
Chevron	No	Rando HDZ 32
Conoco Phillips	No	Unax AW-WR-32
Clarion (CITGO)	Yes	Green Bio 32
Exxon Mobil	Yes	EAL 224H
Chevron	Yes	Clarity AW32
RSC Bio Solutions	Yes	Envirologic 132
Shell	Yes	Naturelle HF-E-32

*Recommended for extreme cold weather operation.

STANLEY Infrastructure

SYSTEM SPECIFICATIONS

HYDRAULIC SYSTEM SPECIFICATIONS SUITABLE FOR POWERING HTMA TYPE I HYDRAULIC TOOLS

GENERAL SPECIFICATIONS

The following specifications are for a hydraulic system which will deliver the performance of an HTMA Type 1 system. The HTMA Type 1 system has a flow requirement of 5 gpm, plus or minus 10%.

The hydraulic system shall be an open-center type system and deliver the design flow rate over a pressure load range of 1000 to 2000 psi. Alternatively, the system may be a closed-center type having the same hydraulic performance.

The system pressure limiting component shall begin to control at a pressure no less than 2150 psi / 148 bar and shall limit the maximum pressure to no more than 2250 psi / 155 bar. This component may be a relief valve, used with a non-pressure compensating pump system, or the pressure control used with a pressure-compensating pump system.

The flow loss in the return side of the system must be low enough so that the return pressure (back pressure), when measured at the tool end of the tool hose is not more than 250 psi / 17 bar. This measurement is to be made with the system at minimum operating temperature and the hydraulic oil viscosity no higher than 400 SSU / 86 cst. For ISO Grade 32 hydraulic oil, the system temperature will be approximately 50° F / 10° C.

The hydraulic system shall have sufficient heat rejection capacity to limit the maximum oil temperature to 140° F / 60° C at the maximum expected ambient temperature. The minimum cooling capacity to dissipate tool-generated heat is 3 hp / 7,635 BTU/hr. This cooling capacity may be modified taking into consideration intended tool operation duty cycle and system generated heat.

The hydraulic system shall have a return line filter rated for 25 micron nominal filtration. The filter shall have a flow capacity of at least 15 gpm.

The hydraulic system shall use a fluid which has a viscosity of 150-225 SSU / 32-50 cst at 100° F / 38° C. Hydraulic fluids of petroleum base with anti-wear properties and high viscosity indexes over 140 will meet fluid requirements over an wide range of operating temperatures.

DETAIL SPECIFICATIONS

The hydraulic reservoir shall be of a metal construction with a fluid holding capacity of 8 to 13 gallons. The reservoir shall include a vented filler/breather with a filter basket. It shall have a 140-mesh or 125 micron pump suction strainer located near the bottom and a rigid internal baffle to prevent direct cross flow from return to suction. The fluid return shall be below the lowest fluid level in order to prevent air entrainment. The reservoir shall include a fluid level indicator to show fluid level from the minimum requiring fill to the maximum showing full. It shall include a drain, low near the bottom, to provide for draining settled-out water or complete emptying of
the reservoir. There shall be provision for access to the inside for servicing the suction strainer and cleaning the reservoir.

The fluid line from the reservoir to the pump suction port shall have an inside diameter of 1.25 inches / 32 mm.

The pump shall be sized to deliver the system design flow at a shaft speed determined by the prime mover speed and any speed reduction between it and the pump. For vehicles with automatic transmissions, the engine speed should be between 1700 and 2000 rpm. For example, if the power takeoff speed ratio is .75, then the pump speed will be 1275 to 1500 rpm. The pump displacement will be between 0.770 and 0.906 cubic inches per rev. For a fixed-displacement pump, these displacements will be that of the pump. For variable-displacement pumps, these displacements will be the pump displacement setting while operating the hydraulic tool system. The pump shall have a maximum pressure rating of at least 3000 psi.

The pressure line from the pump outlet to the directional valve shall have an inside diameter of 0.75 inches / 19 mm. The working pressure of the line shall be at least 2500 psi.

If no bi-directional tools will be used, the directional control valve shall be ¾-inch size two-position two-port or three-port diverter valve. Only the pressure side flow will go through the valve. For an open-center system, in the OFF position the valve will bypass flow to the system return; in the ON position the valve will block the bypass to the system return. For a closed-center system, in the OFF position the valve will block the pump port and connect the tool to the return; in the ON position the valve will connect the pump to the tool. It must be rated for working pressure of at least 2500 psi.

If bi-directional tools will be used, the directional control valve shall be a ¾-inch size three-position, four-port valve. The valve spool shall be a motor spool. For an open-center system, all ports must be connected to the tank port in the neutral position. For a closed-center system, the tool ports must be connected together. It must be rated for working pressure of at least 2500 psi.

The relief valve may be a separate component or integral to the directional control valve. It may be either direct operating or pilot operated. It shall be set with the cracking pressure at 2150 psi / 148 bar. The maximum full-flow bypass pressure shall not be more than 2250 psi / 155 bar.

The air-to-oil cooler must be sized and placed to have the required heat rejection capacity. If the vehicle engine does not have a temperature-controlled fan, the oil cooler may be mounted in front of the vehicle radiator. The cooler will be the largest that will cover the radiator and must be at least 1 ½ inches thick. The oil cooler must have low enough air flow resistance so as not to seriously reduce the vehicle cooling capacity. If the vehicle has a temperature-controlled fan, then an air-to-oil cooler with fan(s) must be selected. This cooler must be installed where it will have unimpeded air flow. The ports in the cooler shall be at least 1-inch size. Integral to the cooler or separately installed with the cooler shall be a bypass check valve or thermal diverter valve to allow fluid to bypass the cooler at low temperatures and high viscosities until the fluid temperature reaches
working temperatures. If a thermal diverter valve is used, it should have a temperature setting between 85° and 95° F / 29° and 35° C. If a separately-fanned cooler is selected, it shall have a thermal switch to turn on the fan(s) when oil flows through the cooler.

The system return lines shall have an inside diameter of .75 or 1.00 inch. The lines shall have a working pressure rating of at least 250 psi.

The hydraulic system shall have HTMA flush-face quick-acting couplers for connecting tools to the system. The coupler nose shall be on the pressure port and the coupler body shall be on the return port. These will be located according to the requirements of the end-user.

All connections shall be assembled and sealed to assure there will be no leaks. All components shall be suitable for mobile hydraulic systems and have flow capacity and working pressures which meet the requirements of the system.
All lines shall be installed and restrained to prevent contact with hot engine components and prevent fatigue failure due to vibration or abrasion. The system shall be flushed clean and filled with clean hydraulic fluid.

The system will be accepted after verification by the customer that the system performance meets specifications.

HYDRAULIC SYSTEM SPECIFICATIONS SUITABLE FOR POWERING HTMA TYPE II HYDRAULIC TOOLS

GENERAL SPECIFICATIONS

The following specifications are for a hydraulic system which will deliver the performance of an HTMA Type 2 system. The HTMA Type 2 system has a flow requirement of 8 gpm, plus or minus 10%.

The hydraulic system shall be an open-center type system and deliver the design flow rate over a pressure load range of 1000 to 2000 psi. Alternatively, the system may be a closed-center type having the same hydraulic performance.

The system pressure limiting component shall begin to control at a pressure no less than 2150 psi / 148 bar and shall limit the maximum pressure to no more than 2250 psi / 155 bar. This component may be a relief valve, used with a non-pressure compensating pump system, or the pressure control used with a pressure-compensating pump system.

The flow loss in the return side of the system must be low enough so that the return pressure (back pressure), when measured at the tool end of the tool hose is not more than 250 psi. This measurement is to be made with the system at minimum operating temperature and the hydraulic oil viscosity no higher than 400 SSU / 86 cst. For ISO Grade 32 hydraulic oil, the system temperature will be approximately 50° F / 10° C.

The hydraulic system shall have sufficient heat rejection capacity to limit the maximum oil temperature to 140° F / 60° C at the maximum expected ambient temperature. The minimum cooling capacity to dissipate tool-generated heat is 5 hp / 12,725 BTU/hr. This cooling capacity may be modified taking into consideration intended tool operation duty cycle and system generated heat.

The hydraulic system shall have a return line filter rated for 25 micron nominal filtration. The filter shall have a flow capacity of at least 25 gpm.

The hydraulic system shall use a fluid which has a viscosity of 150-225 SSU / 32-50 cst at 100° F / 38° C. Hydraulic fluids of petroleum base with anti-wear properties and high viscosity indexes over 140 will meet fluid requirements over an wide range of operating temperatures.

STANLEY Infrastructure

DETAIL SPECIFICATIONS

The hydraulic reservoir shall be of a metal construction with a fluid holding capacity of 12 to 20 gallons. The reservoir shall include a vented filler/ breather with a filter basket. It shall have a 140-mesh or 125 micron pump suction strainer located near the bottom and a rigid internal baffle to prevent direct cross flow from return to suction. The fluid return shall be below the lowest fluid level in order to prevent air entrainment. The reservoir shall include a fluid level indicator to show fluid level from the minimum requiring fill to the maximum showing full. It shall include a drain, low near the bottom, to provide for draining settled-out water or complete emptying of the reservoir. There shall be provision for access to the inside for servicing the suction strainer and cleaning the reservoir.

The fluid line from the reservoir to the pump suction port shall have an inside diameter of 1.25 inches / 32 mm.

The pump shall be sized to deliver the system design flow at a shaft speed determined by the prime mover speed and any speed reduction between it and the pump. For vehicles with automatic transmissions, the engine speed should be between 1700 and 2000 rpm. For example, if the power takeoff speed ratio is .75, then the pump speed will be 1275 to 1500 rpm. The pump displacement will be between 1.449 and 1.232 cubic inches per rev. For a fixed-displacement pump, these displacements will be that of the pump. For variable-displacement pumps, these displacements with be the pump displacement setting while operating the hydraulic tool system. The pump shall have a maximum pressure rating of at least 3000 psi.

The pressure line from the pump outlet to the directional valve shall have an inside diameter of 0.75 inches / 19 mm. The working pressure of the line shall be at least 2500 psi.

If no bi-directional tools will be used, the directional control valve shall be ¾-inch size two-position two-port or three-port diverter valve. Only the pressure side flow will go through the valve. For an open-center system, in the OFF position the valve will bypass flow to the system return; in the ON position the valve will block the bypass to the system return. For a closed-center system, in the OFF position the valve will block the pump port and connect the tool to the return; in the ON position the valve will connect the pump to the tool. It must be rated for working pressure of at least 2500 psi.

If bi-directional tools will be used, the directional control valve shall be a ¾-inch size three-position, four-port valve. The valve spool shall be a motor spool. For an open-center system, all ports must be connected to the tank port in the neutral position. For a closed-center system, the tool ports must be connected together. It must be rated for working pressure of at least 2500 psi / 172 bar.

HANDHELD TOOLS

SYSTEM SPECIFICATIONS

The relief valve may be a separate component or integral to the directional control valve. It may be either direct operating or pilot operated. It shall be set with the cracking pressure at 2150 psi / 148 bar. The maximum full-flow bypass pressure shall not be more than 2250 psi / 155 bar.

The air-to-oil cooler must be sized and placed to have the required heat rejection capacity. If the vehicle engine does not have a temperature-controlled fan, the oil cooler may be mounted in front of the vehicle radiator. The cooler will be the largest that will cover the radiator and must be at least 1 ½ inches thick. The oil cooler must have low enough air flow resistance so as not to seriously reduce the vehicle cooling capacity. If the vehicle has a temperature-controlled fan, then an air-to-oil cooler with fan(s) must be selected. This cooler must be installed where it will have unimpeded air flow. The ports in the cooler shall be at least 1-inch size. Integral to the cooler or separately installed with the cooler shall be a bypass check valve or thermal diverter valve to allow fluid to bypass the cooler at low temperatures and high viscosities until the fluid temperature reaches working temperatures. If a thermal diverter valve is used, it should have a temperature setting between 80° and 90° F / 26° and 32° C. If a separately-fanned cooler is selected, it shall have a thermal switch to turn on the fan(s) when oil flows through the cooler.

The system return lines shall have an inside diameter of .75 or 1.00 inch. The lines shall have a working pressure rating of at least 250 psi.

The hydraulic system shall have HTMA flush-face quick-acting couplers for connecting tools to the system. The coupler nose shall be on the pressure port and the coupler body shall be on the return port. These will be located according to the requirements of the end-user.

All connections shall be assembled and sealed to assure there will be no leaks. All components shall be suitable for mobile hydraulic systems and have flow capacity and working pressures which meet the requirements of the system.
All lines shall be installed and restrained to prevent contact with hot engine components and prevent fatigue failure due to vibration or abrasion. The system shall be flushed clean and filled with clean hydraulic fluid.

The system will be accepted after verification by the customer that the system performance meets specifications.

TESTING A HYDRAULIC SYSTEM FOR COMPARISON TO HTMA RECOMMENDATIONS

The objective of this test is to determine how your hydraulic system performance compares with HTMA (Hydraulic Tool Manufacturers Association) recommended hydraulic system performance.

To perform these tests, you will need a flow and pressure tester such as our P/N 04182 or P/N 29085 shown below and two thermometers (the P/N 29085 has a built-in thermometer).

STANLEY P/N 04182

STANLEY P/N 29085

HTMA RECOMMENDATIONS FOR A HYDRAULIC SYSTEM OPERATING TYPE I HYDRAULIC TOOLS:

- 5 gpm ± 10% / .5 gpm at 2000 psi measured at the tool inlet.
- 200 psi or less return pressure at 5.5 gpm—pressure measured at the tool outlet.
- Limit system temperature to 140° F on the hottest expected day. Choosing 100° F as the hottest expected day's temperature, the hydraulic system must maintain a 40 degree temperature difference, air to oil. For example, if the ambient air temperature is 100° F, then the oil temperature should not exceed 140° F.
- To simulate tool-generated heat during operation, HTMA recommends using 3 hp, minimum. A reading of 1030 psi minimum at the flow and pressure tester will achieve the recommended 3 hp, minimum.

HTMA RECOMMENDATIONS FOR A HYDRAULIC SYSTEM OPERATING TYPE II HYDRAULIC TOOLS:

- 8 gpm ± 10% / .8 gpm at 2000 psi measured at the tool inlet.
- 200 psi or less return pressure at 8.8 gpm, pressure measured at the tool outlet.
- Limit system temperature to 140° F on the hottest expected day. Choosing 100° F as the hottest expected day's temperature, the hydraulic system must maintain a 40 degree temperature difference, air to oil. For example, if the ambient air temperature is 100° F, then the oil temperature should not exceed 140° F.
- To simulate tool-generated heat during operation, HTMA recommends using 5 hp, minimum. A reading of 1100 psi minimum at 8 gpm at the flow and pressure tester will achieve the recommended 5 hp, minimum.

Select an open site where the air is relatively calm. Place one thermometer in the oil reservoir to measure the temperature of the circulating oil (surface mounted tank thermometers do not adequately measure the temperature of the bulk system oil). Hang the other thermometer in still air to measure the ambient air temperature.

Connect the flow and pressure tester to the tool hoses. Fully open the load valve on the tester.

Start up the system (with tool circuit control valve OFF) and warm the hydraulic fluid (if necessary) to a minimum of 50° F.

LOW TEMPERATURE AND MAXIMUM VISCOSITY BACK PRESSURE TEST

Turn ON the tool circuit control valve. Record oil temperature, ambient air temperature, flow rate, and back pressure.

Air: _____ ° F

Oil: _____ ° F

Flow rate: _____ gpm

Back pressure: _____ psi

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HYDRAULIC SYSTEM'S CAPACITY TO DELIVER FLOW AGAINST 2000 PSI TEST

Close the load valve to where the pressure gage reads 2000 psi. Record flow rate, back pressure, and oil temperature.

Flow rate: _____ gpm

Back pressure: _____ psi

Oil: _____ ° F

SYSTEM CAPACITY TO CONTROL TEMPERATURE TEST

Raise the system temperature to 140° F by adjusting the pressure using the load valve on the flow and pressure tester. If it takes more than 1900 psi to get the system temperature to 140° F, adjust the pressure to stabilize the system temperature at some lower temperature, e.g. 120° F.

When the system temperature has remained constant for about 15 minutes, record the flow rate, pressure, back pressure, oil temperature, and air temperature.

Flow rate: _____ gpm

Pressure: _____ psi

Back pressure: _____ psi

Air: _____ ° F

Oil: _____ ° F

CALCULATE THE TOOL LOAD HP COOLING CAPACITY FOR AN EFFECTIVE 40 DEGREE TEMPERATURE DIFFERENCE, AIR TO OIL USING THE FOLLOWING FORMULA.

$$\frac{(\text{Pressure} - \text{Back pressure}) \times \text{gpm}}{43 \times (\text{Oil temperature} - \text{Air Temperature})} = \text{hp (horse power)}$$

Example:

Flow rate:	5	gpm
Pressure:	1500	psi
Back pressure:	100	psi
Air:	70	° F
Oil:	120	° F

$$\frac{(1500 - 100) \times 5}{43 \times (120 - 70)} = \text{3.3 hp at 40° F temperature difference}$$

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