

Twin Pump Trailer

2x CAT C15/Allison 6000 Serie



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Gerätepass/Pass Card

2XHPS C15 6A 600M

Serien Nr./Serial No.:

Baujahr/Year of Construction:



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1 Technische Daten/Technical data

1.1 Maße des Pumpcontainers/Measurements Pump Container

Schallgedämpter 20-ft.-Container mit folgenden Maßen/

Sound absorbed 20-ft. Container with following measurements:

-Länge/Lenght:	8000 mm
-Breite/Width:	2500 mm
-Höhe/Height :	3000 mm
-Gewicht/Weight:	31500 KG

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1.2 Leistungsdaten Motor/Power Data Engine

2 X Caterpillar, Typ: C-15 ATAAC, Engine No. JRE08496 (Left) + JRE08497 (Right)

Zertified according to DIRECTIVE 97/68/EC and U.S. EPA & CARB Tier II

-Leistung/Power: 433 KW bei 2100 r/min

1.3 Leistungsdaten Getriebe/Power Data Transmission

2 X Allison Powershift Transmission Serie CLT 5960/4,

Transmission Nr. 72727 (Left) + 46868 (Right)

Übersetzungsverhältnis/Gear ratio	1. Gang = 4 :1
	2. Gang = 2,68:1
	3. Gang = 2,01:1
	4. Gang = 1,35:1
	5. Gang = 1 :1

1.4 Leistungsdaten Hochdruckpumpe/Power Data High Pressure Pump

MSI High pressure pump (Left) Typ: TI600, Pumpen-Nr.:

MSI High pressure pump (Right) Typ: TI600, Pumpen-Nr.:

Antriebsflansch/Drive flange: Spicer Serie 1800

Eingangsdrehrichtung/Dir. Of rot./input: Uhrzeigersinn auf Flansch gesehen/Clockwise-from flange

Eingangsdrehzahl/Initial speed: max. 2100 min⁻¹

Übersetzungsverhältnis/Ratio: 4.61 : 1

Getriebeeingang/Input / HP pump: Untersetzergetriebe/Reduction transmission

Kurbelwelle/Crank shaft: Sonderstahl, 4-fach gelagert/Special steel

Pleuelstangen/Con rod: Sonderstahl/Special steel

Kreuzköpfe/Cross clamp: Sonderstahl/Spezial steel

Gehäuse/Housing: Schweißkonstruktion aus Spezialstahl/Welding construction, special steel

Lagertypen/Bearing types: Rollen und Gleitlager/Coasting, bush bearings

Ölsystem/Oil system: Zahnradpumpe mit Antrieb vom Allison Getriebe/Gear pump with PTO

Ölfilter/Oil filter: Auswechselbare Filterelementen System

Ölmenge/Oil volume: Schröder/Movable filter elements system „Schroeder“ 230 L.

Öltyp/Oil type: SHC 75W-90LS

Öldruck/Oil pressure: 80-100 psi (4,8-7 bar)

Gewicht trocken/Dry weight: 1286 kg



1.4.1 Leistungsdaten Fluid End/Power Data Fluid End

Serial-No.:	(4.5") Left
Serial-No.:	(2.75") Right
Fluid End Typ:	Flüssigkeitshochdruckteil/Fluidity High-pressure part
Ausführung/Design:	Waagrecht liegend, einteilig, aus Spezialstahl/Horizontal, one-piece, special steel
Plunger type:	Einfach arbeitend, oberflächenbehandelt/Single working, surface treated
Ventiltyp/Valve type:	Geführte Ventile aus Spezialstahl/Guided valves, special steel
Hochdruckdichtung/High pressure gasket:	Spezial Packung
Hochdruckanschluss/High pressure connect:	2" Gewinde Weco 1502/2" Tread Weco 1502
Plungerölsystem/Plunger oil system:	30 L. Ölvorrat mit Druckluft beaufschlagt/30 L. Oil storage, pressurised
Gewicht/Weight:	ca. 1286 KG

Gewicht der kpl. Pumpe/Weight of compl. pump:	2086 KG
Arbeitsdruck FE 4-1/2"max/Oper. Press. FE4-1/2":	6288 psi (433 bar)
Fördervolumen max:	2111 L./Min.
Arbeitsdruck FE 2-3/4"max/Oper. Press. FE4-1/2":	16836 psi (1161 bar)
Fördervolumen max:	788 L./Min.

Abgabeleistung max: $500 \text{ HHP} = P \times V \times 2,2$
P in bar
V in $\text{m}^3/\text{min}^{-1}$

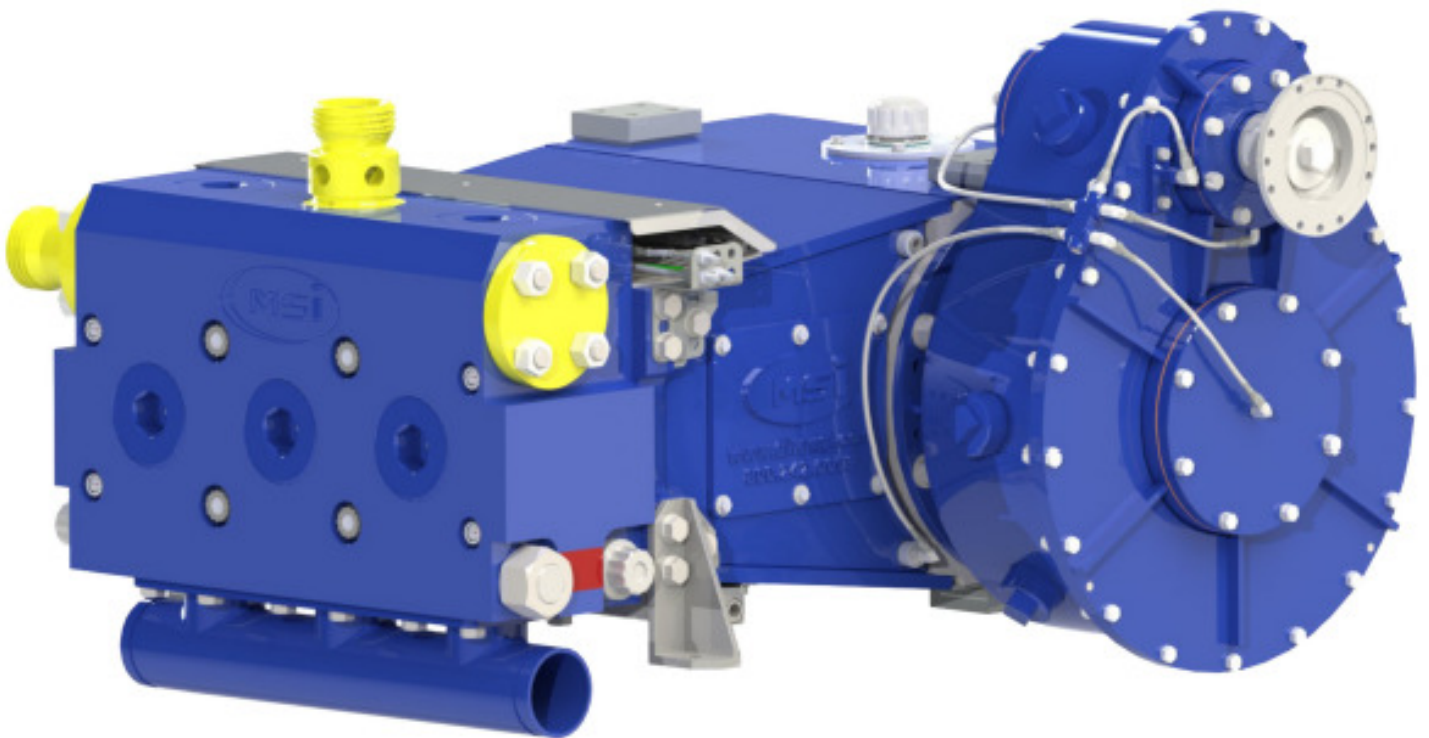
1.5 Maße und Beschreibung des Trailers/Measurements and Discription of the Trailer

Erzeugnis/Product:	3 Axle Deck Plattform Semi Trailer	
Hersteller/Manufacturer:	Kässbohrer Fahrzeugwerke GmbH	
Type:	JS	
Jahr/Year:	2012	
Fahrgest.Nr./Chassis Nr.:		
Maximum Total Weight:	40.000 kg	
King Pin Pressure:	16.000 kg	
Maximum Axle Load:	Axle No.1:	8.000 kg
	Axle No.2:	8.000 kg
	Axle No.3:	8.000 kg
Länge über alles/Overall Length:	13.865 mm	
Breite über alles/Overall Width:	2.480 mm	
Höhe über alles/Overall Height:	4.000 mm	
Leergewicht/Empty Weight:	5.600 kg	
Reifen/Tyres:	235/75 R17.5	

Gewicht der kpl. Einheit/Weight of compl. Unit:32.000 kg



TIH-600 HP TRIPLEX



The TIH-600 is a 600 brake horsepower triplex pump that comes with many standard features, but its most important feature is the MSI commitment to Quality.

The MSI TIH-600 Pump is a re-engineered well service pump. The first compact well service pump to utilize the 2 plunger design which eliminates contamination of the power end. The MSI Hybrid Triplex Pump is the first and only of it's kind which includes:

- 16 Position Gear Box for both left and right-hand configurations
- 2 Fluid End options for either high-pressure or high-volume service
- Power Frame designed for added strength and longevity
- Tools, toolbox, drip-pan and the suction manifold are standard items with each pump.
- Plunger Greasing System can be installed and shipped with the pump for an extra charge.
- All external and internal components are phosphate coated for corrosion protection.

The MSI TIH-600 is equipped with the ON-CENTER CROSSHEAD design which:

- Eliminates 6250 ft-lbs of torque about the wrist pin compared to offset design
- Lowers crosshead bearing pressure by 30% at the start of stroke
- Lowers crosshead bearing pressure by 100% at end of stroke
- Allows for installation of pumps back to back within 102"
- Reduces friction between crosshead and crosshead guides
- Results in low operating lube oil temperatures
- Results in high mechanical efficiency

Left/Right configuration changes are made easier by the following features in the TIH-600:

- Dual lube-pipe system eliminates changes to external lube supply lines.
- Bolt-on feet mean removing and reversing crankshaft is no longer required.
- Top and bottom flange adapters for changing Oil Breather cap and Oil Drain connection

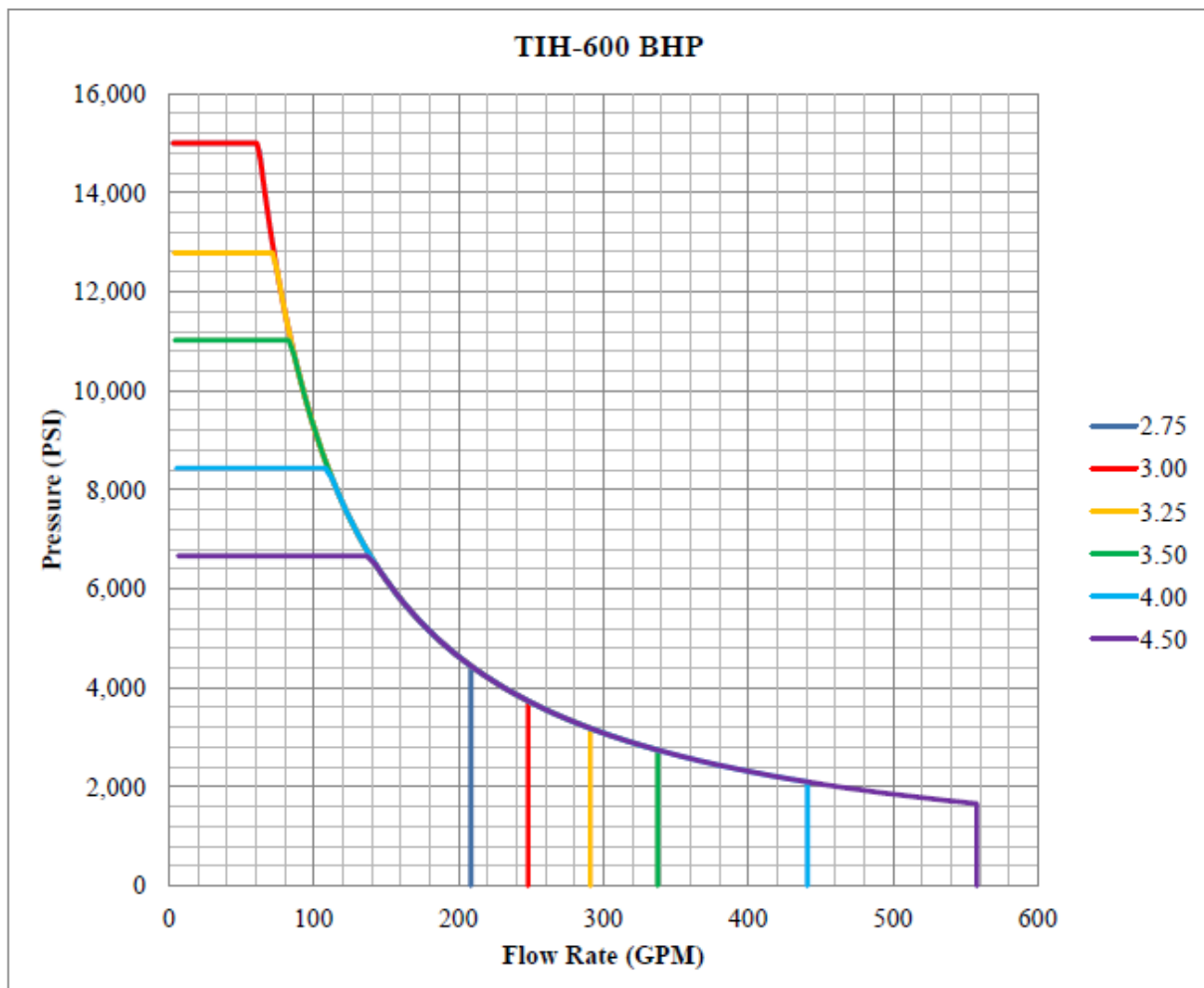
Fluid Ends can be changed to encompass a wide range of high pressure or high volume requirements.

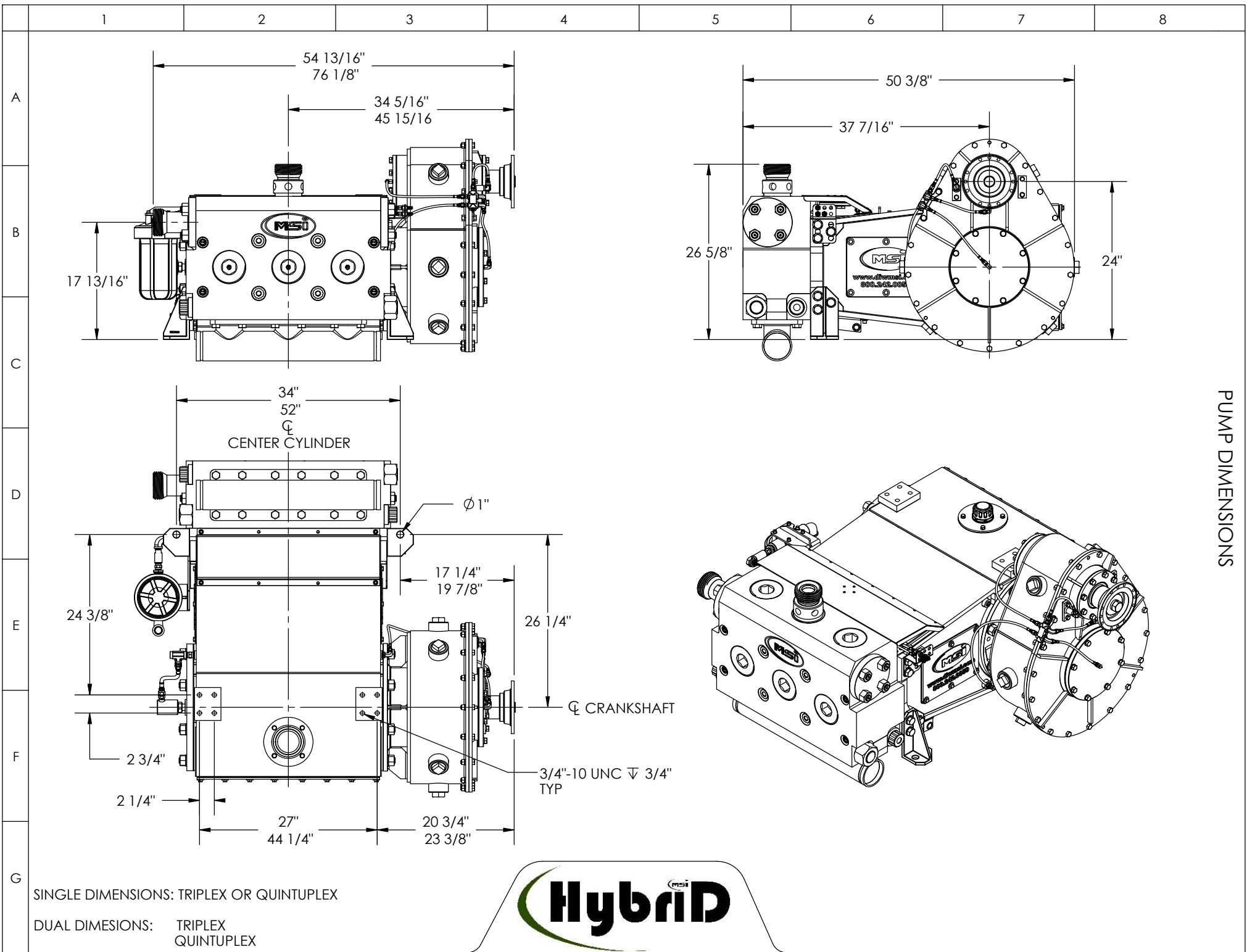
- Small Fluid End accepts 2-3/4 and 3-inch plungers for high pressure service
- Large Fluid End accepts 3-1/2, 4, and 4-1/2 plunger sizes for high volume service

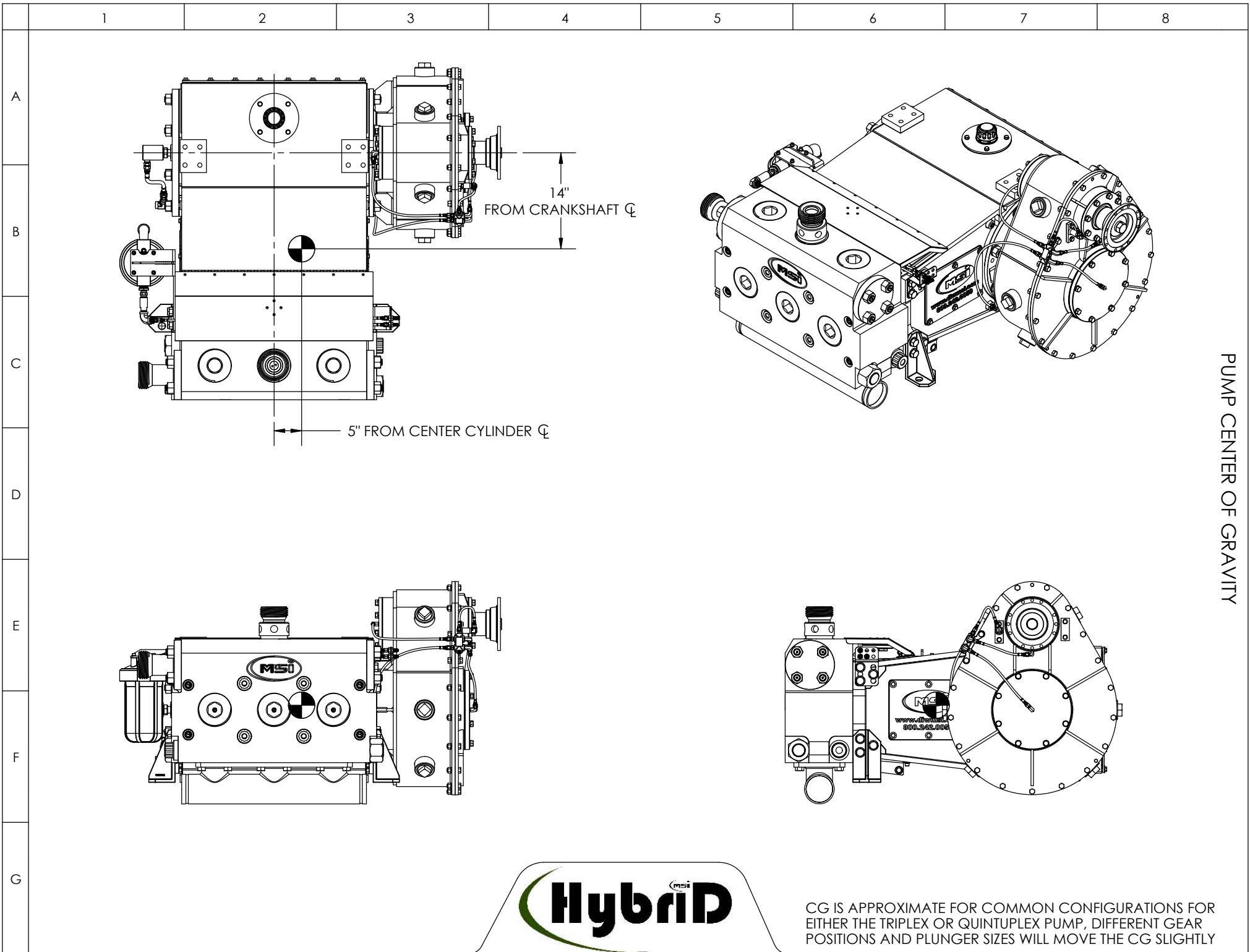
The TIH-600 has a footprint of 19 square feet making it ideal for jobs where space is at a premium.

The TIH-600 is suited for acidizing, cementing, gravel packing, coil tubing and well stimulation.

All pumps are manufactured under MSI's ISO 9001 quality program established in 1993







PUMP CENTER OF GRAVITY



CG IS APPROXIMATE FOR COMMON CONFIGURATIONS FOR EITHER THE TRIPLEX OR QUINTUPLEX PUMP, DIFFERENT GEAR POSITIONS AND PLUNGER SIZES WILL MOVE THE CG SLIGHTLY



Pumptabelle

HPS Twin Trailer MSI TI 600

Ausstattung: Pumpe MSI TI 600, Plunger 2,75“
 Motor CAT C-15, 433 KW
 Getriebe Allison CLT 5960

Gang- stufe	i									
1	4 : 1	1400	1500	1600	1700	1800	1900	2000	2100	Rpm
		133	143	152	162	171	181	190	200	Liter
		1160	1160	1160	1160	1160	1160	1160	1160	bar
2	2,68 : 1	1400	1500	1600	1700	1800	1900	2000	2100	Rpm
		199	213	227	241	256	270	284	298	Liter
		1086	1058	1023	984	940	891	846	806	bar
3	2,01 : 1	1400	1500	1600	1700	1800	1900	2000	2100	Rpm
		265	284	303	322	341	360	379	398	Liter
		814	793	767	738	705	668	635	604	bar
4	1,35 : 1	1400	1500	1600	1700	1800	1900	2000	2100	Rpm
		395	423	451	479	508	536	564	592	Liter
		547	533	515	496	474	449	426	406	bar
5	1,00 : 1	1400	1500	1600	1700	1800	1900	2000	2100	Rpm
		533	571	609	647	685	723	761	799	Liter
		405	395	382	367	351	332	316	301	bar



Pumptabelle

HPS Well Service Pump Container HPS 600

Ausstattung: Pumpe MSI TI 600, Plunger 4-1/2“
 Motor CAT C-15, 433 KW
 Getriebe Allison CLT 5960

Gang- stufe	i									
1	4 : 1	1400	1500	1600	1700	1800	1900	2000	2100	Rpm
		356	381	407	432	548	483	509	534	Liter
		628	610	590	570	538	510	484	461	bar
2	2,68 : 1	1400	1500	1600	1700	1800	1900	2000	2100	Rpm
		531	569	607	645	683	721	759	797	Liter
		421	409	395	382	360	342	324	309	bar
3	2,01 : 1	1400	1500	1600	1700	1800	1900	2000	2100	Rpm
		708	759	810	860	911	961	1012	1063	Liter
		315	306	296	286	270	256	243	232	bar
4	1,35 : 1	1400	1500	1600	1700	1800	1900	2000	2100	Rpm
		1055	1130	1205	1281	1356	1431	1507	1582	Liter
		210	206	199	192	182	172	163	156	bar
5	1,00 : 1	1400	1500	1600	1700	1800	1900	2000	2100	Rpm
		1424	1526	1627	1729	1831	1933	2034	2136	Liter
		157	152	147	142	135	127	121	115	bar