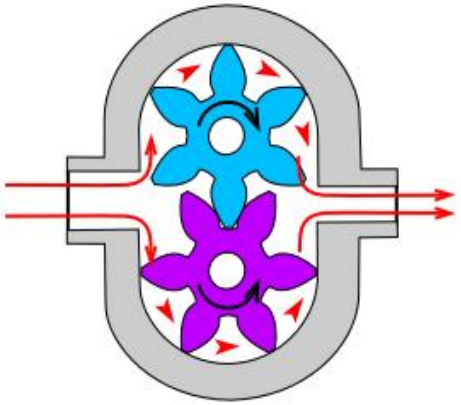
Do you know what a Scanwill intensifier does?

June 14



15 - 200 bar +

=>

500 bar
700 bar
800 bar
2000 bar
2400 bar
2800 bar
4000 bar

The Scanwill intensifier increases a supplied pressure to a higher output pressure!

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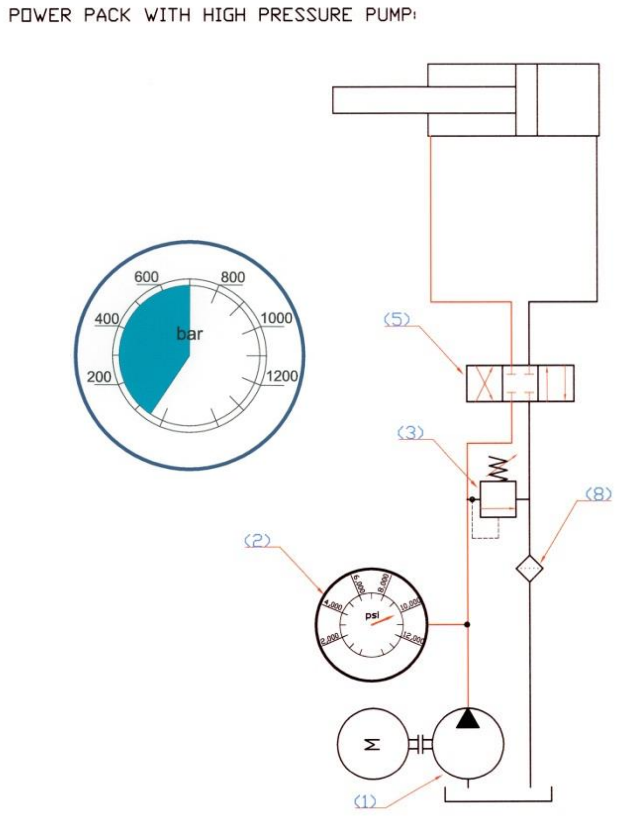
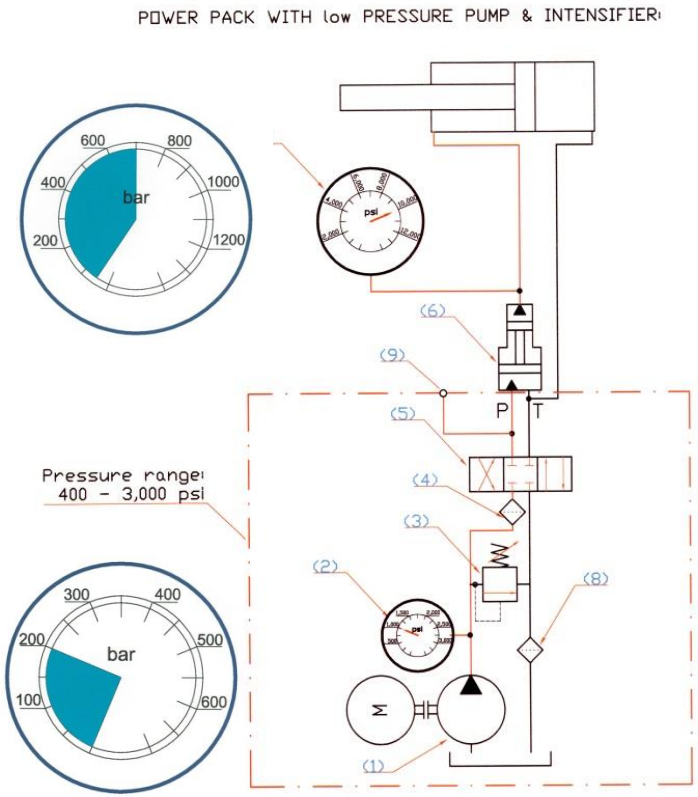
How can we achieve a high pressure?

Most Commonly Used Solution:
Standard High Pressure Pump



The Future <u>Energy Saving</u> Solution:
Scanwill Pressure Intensifier



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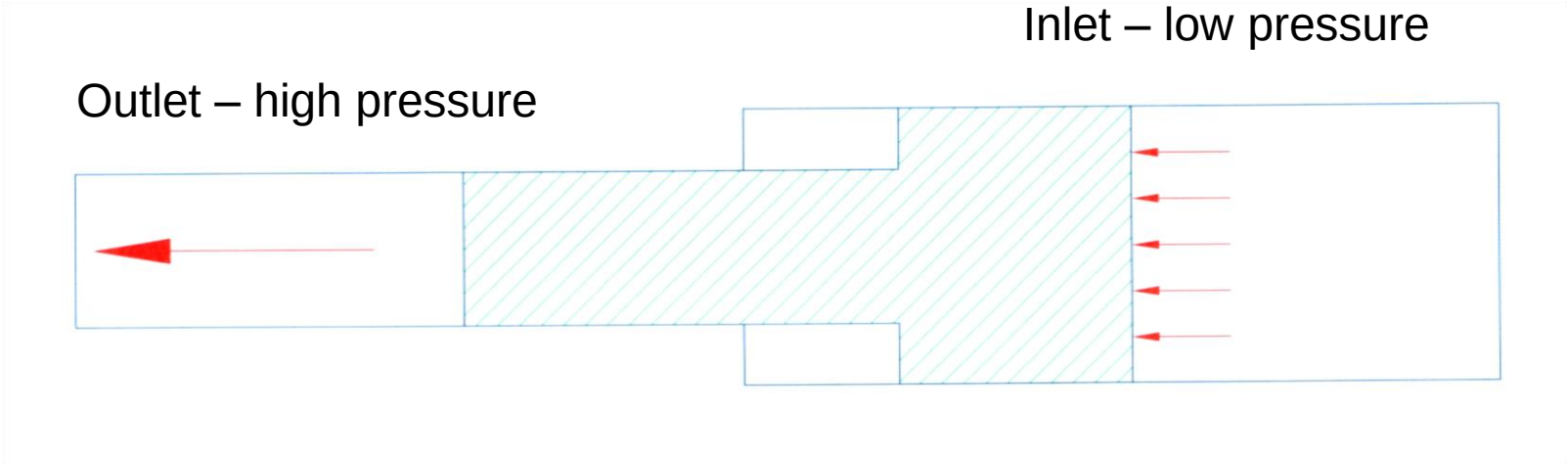
The basic principle of a Scanwill intensifier



The intensifier function as a small “piston pump” in the system and will constantly deliver flow until the output pressure has been reached.

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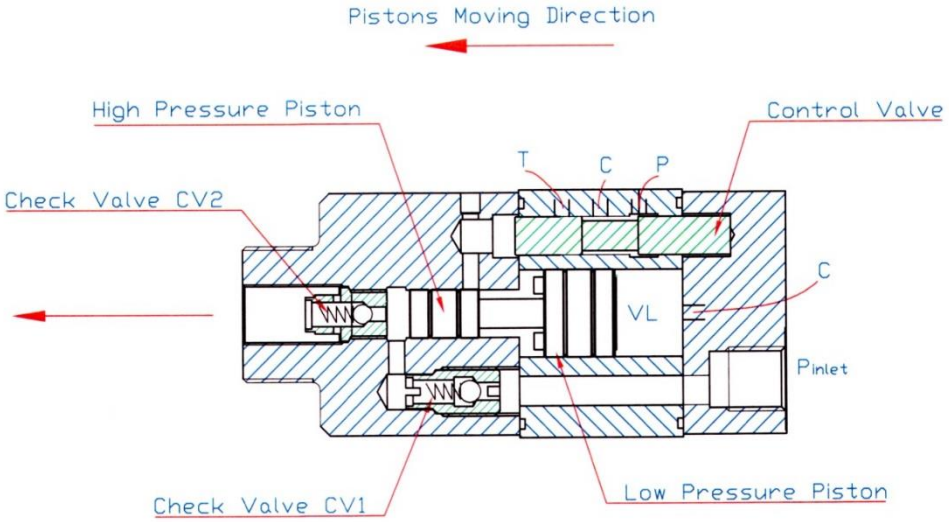
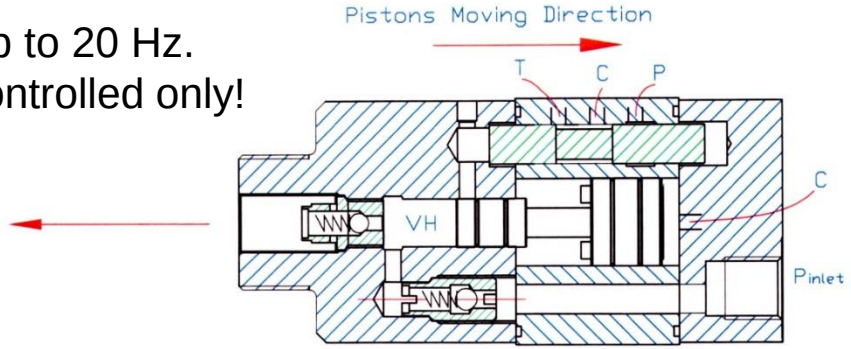
SCANWILL ADDED VALVES AND MADE A COMPACT DESIGN



Piston speed up to 20 Hz.
Hydraulically controlled only!



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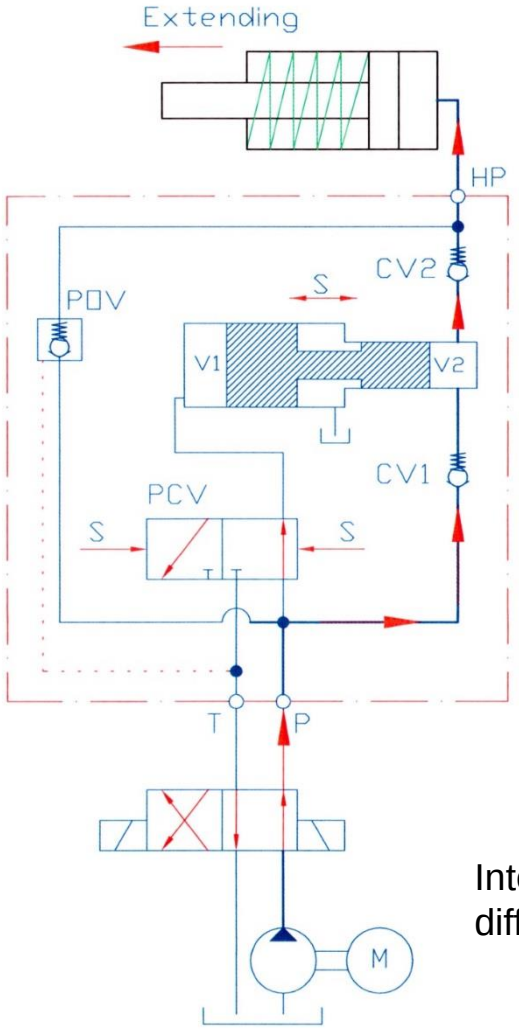
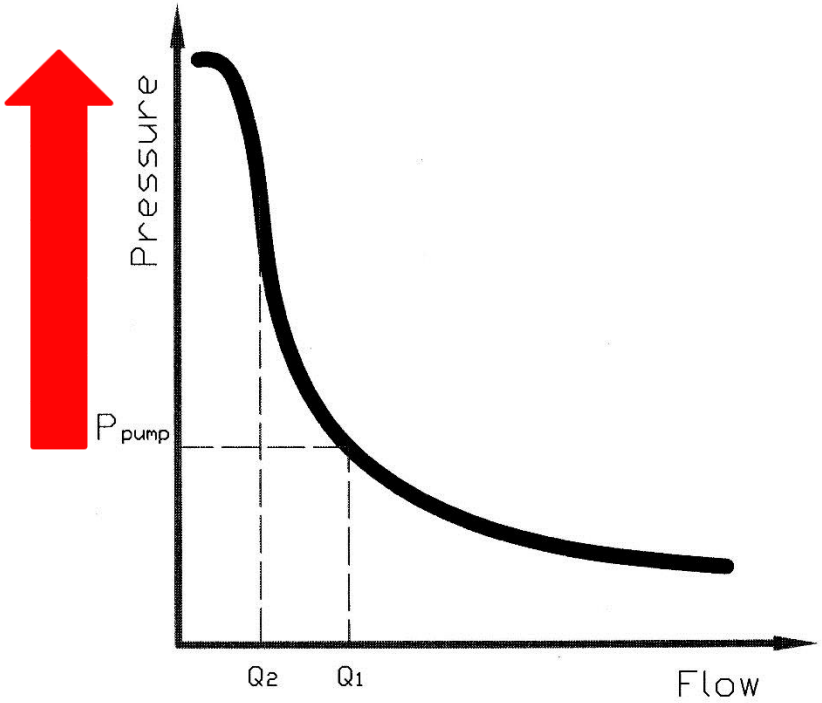
THE BASIC PRINCIPLE & THE GENERAL FLOW-PRESSURE CURVE



Add-on feature
from intensifier!



Intensifier output pressure equals ratio multiplied by the differential pressure between P & T (P minus T)!

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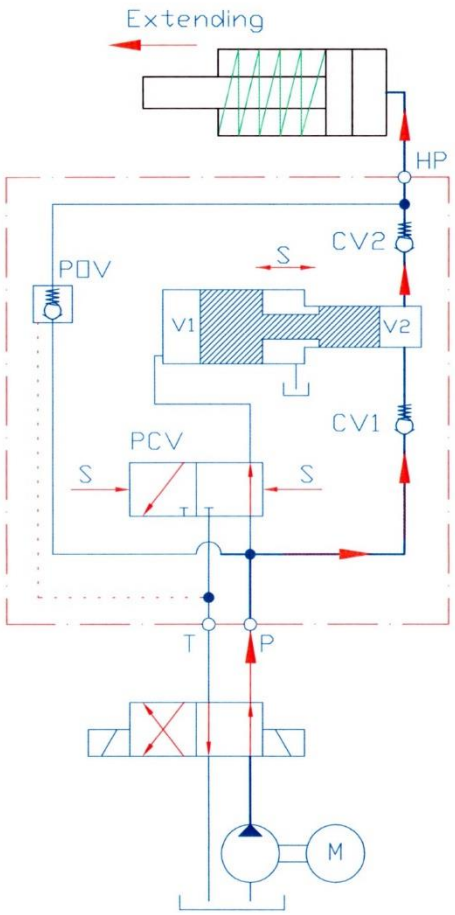
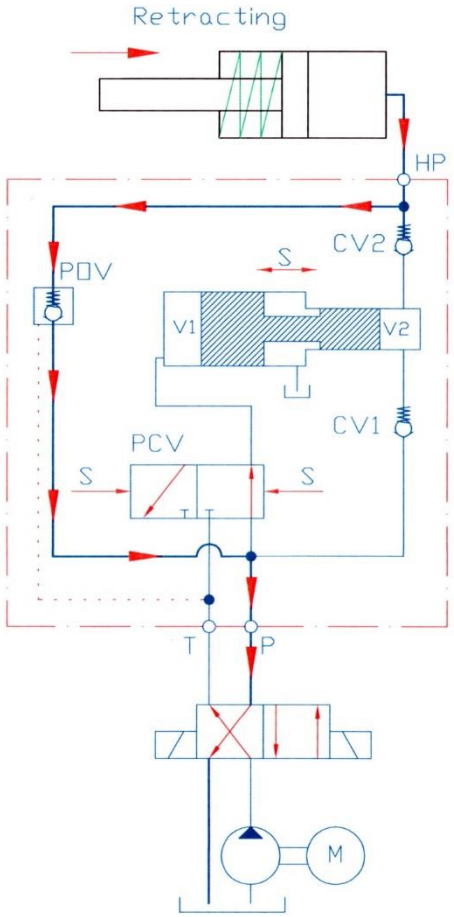
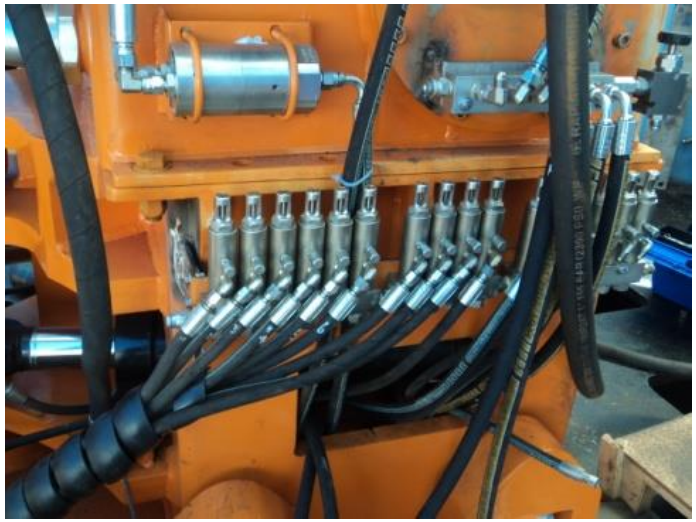
The extending & retracting cycle of Scanwill intensifiers





SCANWILL INTENSIFIERS TECHNICAL DATA

Material:	Cast Iron & Steel (Option: Stainless Steel)
Surface Coating:	Chromite Blue Finish
Minimum inlet flow:	
MP-T, MP-C, MP-F & MP-2000:	2 LPM
MP-M:	7 LPM
MP-L:	15 LPM
Minimum inlet pressure:	15 bar
Temperature Range:	-10 °C to 100 °C
Filtration requirement:	Minimum 10 micron nominal
Fluids:	Standard hydraulic oils Water glycol (min. 5% glycol) Water (stainless steel units only)
Functionality test:	Factory tests – before surface coating/after surface coating



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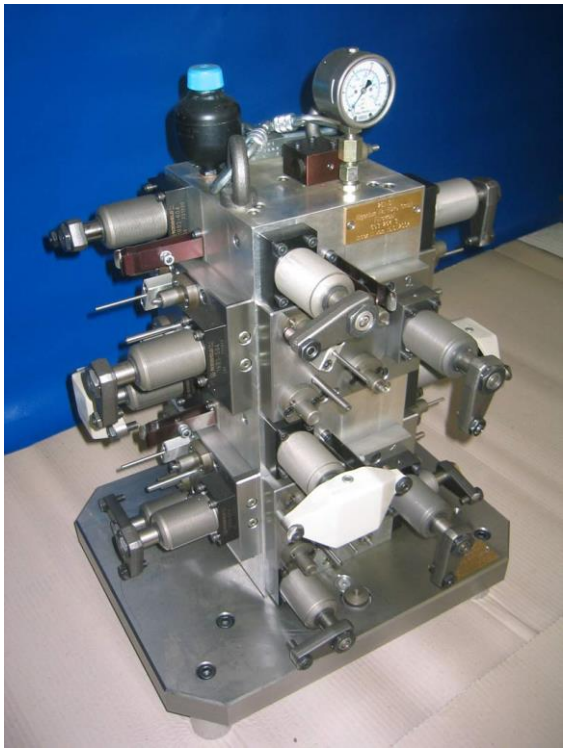
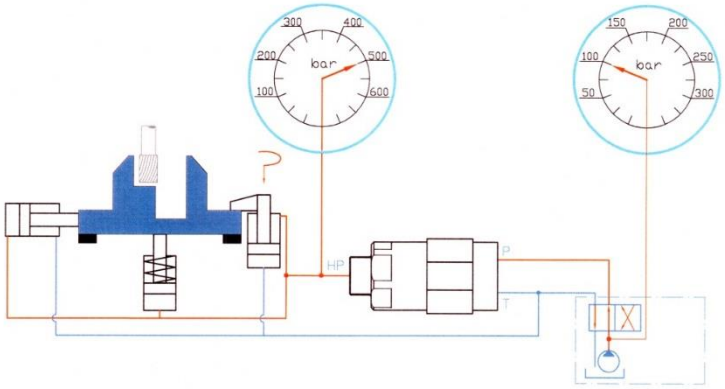
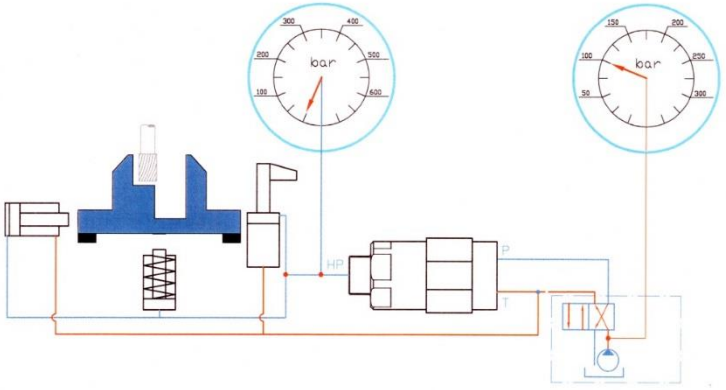
F.A.Q. ABOUT SCANWILL INTENSIFIERS

Is the intensifier a pump?	No!
Does the T-port need to be connected?	Yes, or it will not oscillate.
Can intensifiers operate on fluid ”X”?	If standard hydraulic components are used - then yes! However always ask if special sealing material is required (EPDM, Viton etc.). If it is aggressive fluids check with Scanwill.
Can intensifiers be used for reducing the pressure and/or flow?	No!
Will the intensifiers operate on gas?	No!
Can the intensifiers be traced?	Yes, they are all stamped with a unique serial number.

Application: Work holding
Output pressure: 250 – 500 bar







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Application: Hydraulic Mining Equipment
Output pressure: 300 – 800 bar

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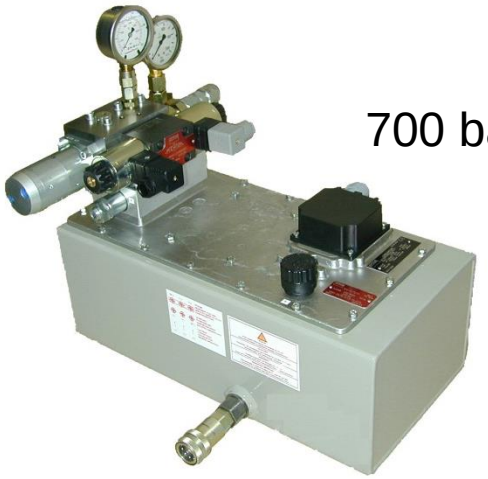
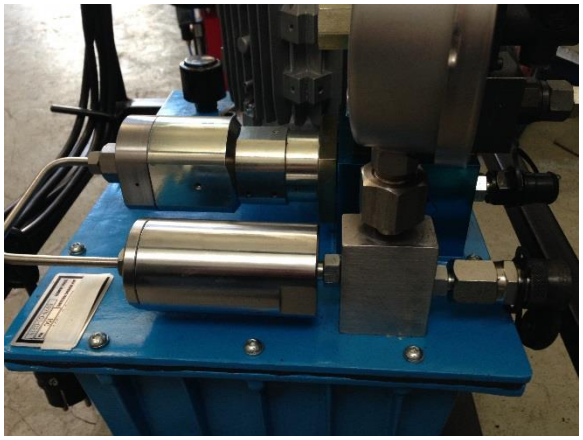
Application: Hydraulic Power Packs
Output pressure: 500 – 2,500 bar



700 bar

2,000 bar



1,400 bar

800 bar

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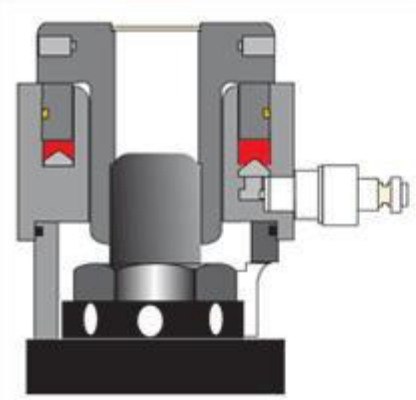
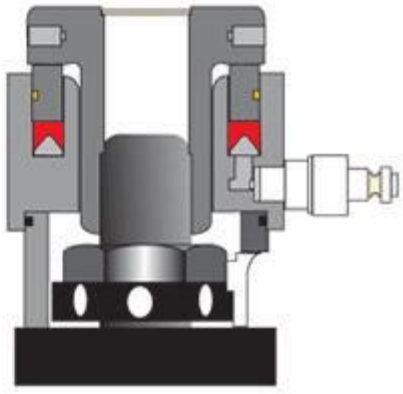
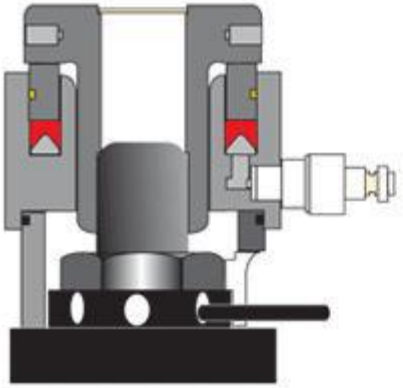
Application: Bolt Tensioning
Output pressure: 1,300 – 2,500 bar



Step 1

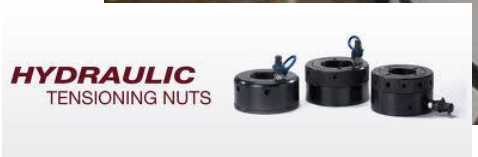


Step 2



Step 3

Step 4



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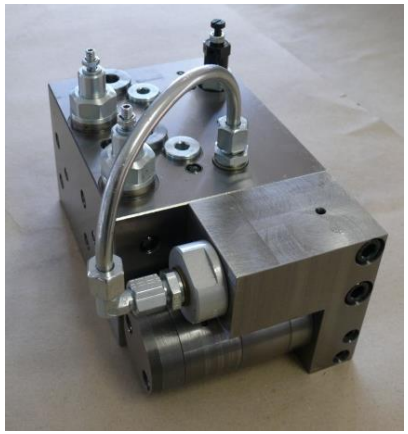
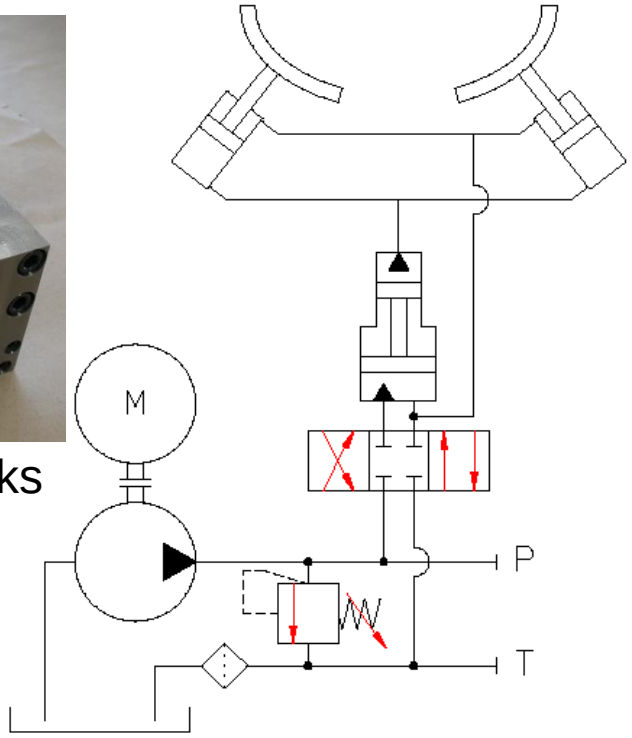
Application: Hydraulic Roughnecks
Output pressure: 500 – 700 bar



Hydraulic Blocks



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Application: Demolition Tools
Output pressure: 500 – 2,800 bar

Handheld Demolition Tools 500 – 700 bar

Concrete Bursting 1,500 – 2,800 bar

Excavator Tools 700 bar

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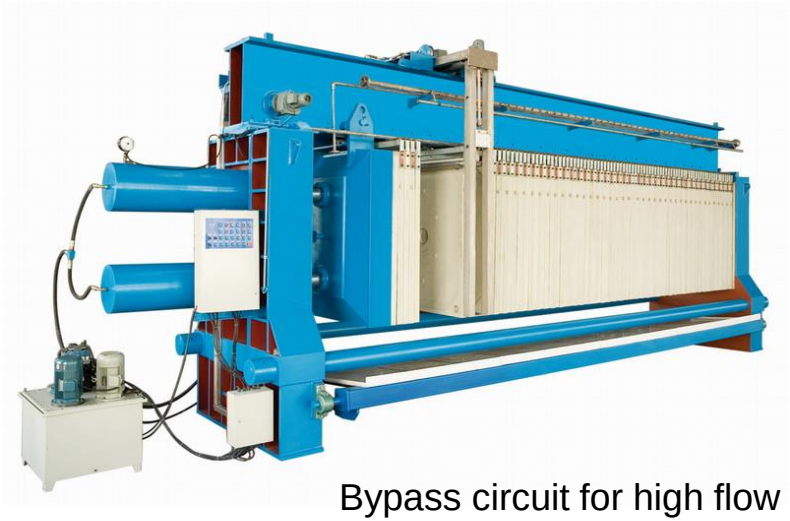
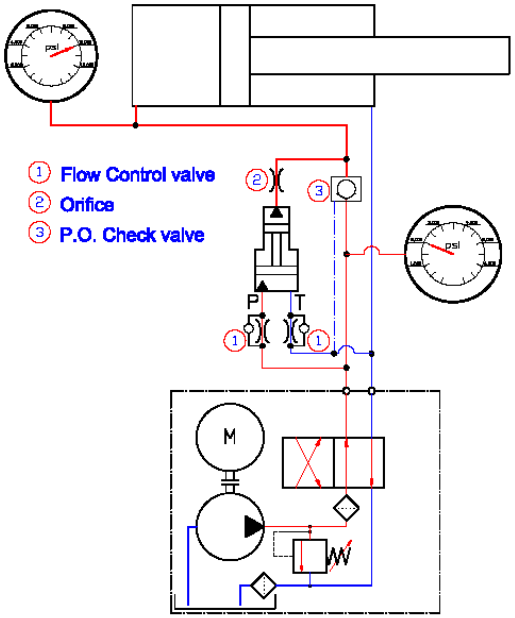
Application: Filter Presses
Output pressure: 500 – 700 bar



Bypass circuit for high flow applications:



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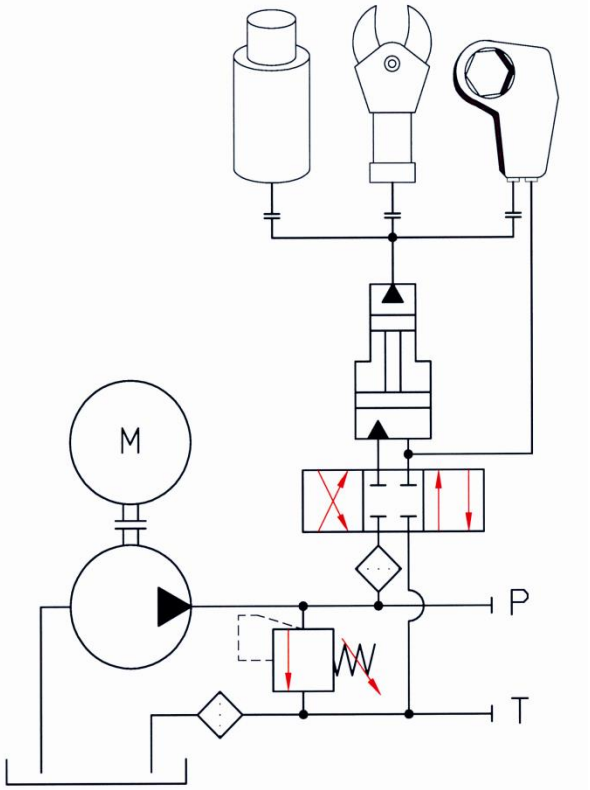
Application: Hydraulic Tools
Output pressure: 500 – 700 bar

Cable Tools

Cutting Tools



ROV Tools

Intensifier panels!

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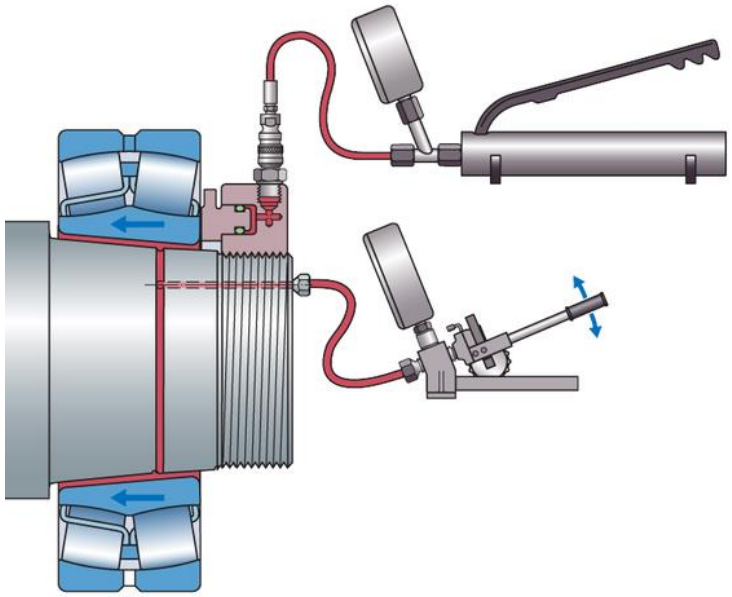
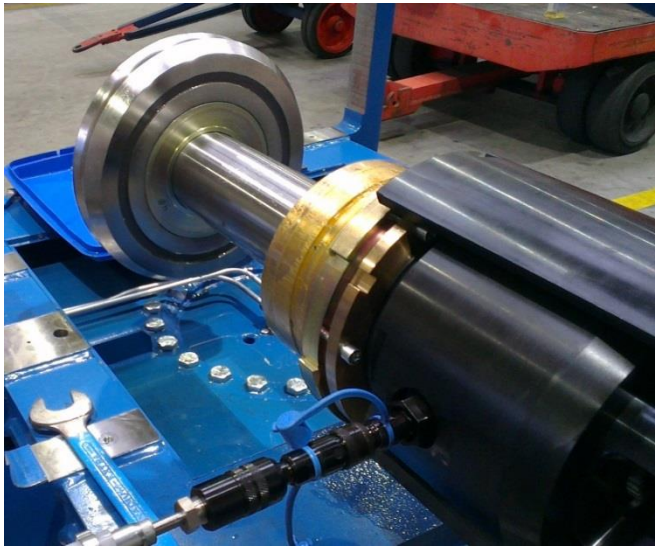
Application: bearing & wheel assembly
Output pressure: 2,500 – 4,000 bar





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Application: Hydraulic Testing
Output pressure: 300 – 2,000 bar

Landing gear testing
(A380 @12 mio. cycles)

High Pressure Testing

Cylinder testing

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SCANWILL INTENSIFIERS IN SHORT…

Characteristics	Advantages	Benefits
• High pressure precisely where needed	• Low operating pressure in the system	• Energy savings for the total system
• High pressure by low pressure pump	• Use existing installed pump	• No need of expensive hp components
• Low pressure in most places	• Longer life of hydraulic components	• Cost savings by maintenance
• Low pressure supply to intensifier	• Use standard tubing, hoses & valves	• Less cost for the total system & higher safety
• Intensifiers are compact components	• Easy to accommodate where needed	• Cost savings by installation
• Intensifier fitted directly to cylinder	• No need for extra tubing or special parts	• Cost & space savings by installation
• Just add Scanwill intensifier	• Use existing equipment for the new task	• Cost savings by installation
• Built-in bypass valve	• Full flow available at pump pressure	• Fast operation until high pressure is reached