

# POWER IS IN YOUR HANDS



HIGH PRESSURE TOOLS



# MULTIFUNCTIONAL SHEAR

Extremely quick and quiet allows to work in any environment minimizing noise, dust and vibrations.



- 1 Fast jaws approach-reopening mechanism
- 2 Cylinder and components in aeronautical grade alloy
- 3 Wear-resistant interchangeable steel insert
- 4 Double-toothed blade with chain attachment point
- 5 Extremely hard interchangeable steel tip
- 6 Ergonomic handle for a better grip in any condition

## THREE TOOLS IN ONE

Based on a modular system consisting of one main body and interchangeable blades sets, in a few steps can be easily converted into 3 different tools: CC300, MS250 and CS350.

Extremely versatile and functional, it is an indispensable partner for demolitions inside inhabited buildings or densely populated areas and the right tool to complete the TEHMA SP400 hydraulic concrete and rock splitter.





# THREE DIFFERENT CONFIGURATIONS

CC300 Concrete crusher / MS250 Shear / CS350 Combi shear (spreader & cutter)

## CC300 Concrete crusher

It demolishes with incredible ease and precision reinforced walls, bricks walls, structures in composite stones and masonry, ceilings, pillars, stairways and every concrete section up to 250 mm (R = 325 kg / cm<sup>2</sup>).

### USES

- Demolitions where is necessary preserving the structure/building integrity avoiding dangerous vibrations (historical buildings, luxury apartments, structures that can fall down).
- Wherever is important to intervene quickly and cleanly without generating dust (hospitals, production departments of companies).
- For any demolition in respect of noise level during the whole day (condos, offices, schools).
- Wherever for reason of space or transportability it is impossible using bigger and heavier machineries (buildings upper floors, aerial platforms, in confined spaces such as basements).
- U.S.A.R. use (Urban Search and Rescue), where it is necessary to help the victims trapped under the rubble caused by earthquakes, floods and explosions due to gas leaks.



## MS250 Shear

Quickly cuts profiled metal structures securely, without dangerous splinters or sparks.

### USES

- Cutting of metal profiles and reinforcements (reinforced mesh, steel rebars).
- Cutting of pipes and metal cables (by means of GS170 jaws equipped with blade guide to avoid excessive torsion and dangerous misalignment of the blades when cutting particularly resistant objects).
- Recycling of precious car parts such catalytic converters and mufflers.
- Interventions in the presence of water and underwater demolitions.



## CS350 Combi shear (spreader & cutter)

Opens easily gaps through reinforcements and previously demolished structures.

### USES

- Quick separation of blocks of reinforced concrete structures previously demolished. (by means of TEHMA CC300 concrete crusher or TEHMA SP400 hydraulic concrete and rock splitter).
- Remove radiators or door frames from walls.
- Cutting metal sheets and other metal structures.



	Cutting/separation force (kN)	Demolition force (kN)	Mouth opening (mm)	Mouth depth (mm)	Weight (kg)	Pressure (bar)	Dimension L x W x H (mm)
CC300	-	101	305	150	22,5	620	850 x 350 x 190
MS250	450	-	200	150	20,5	620	810 x 240 x 190
GS170	450	-	170	135	20,5	620	810 x 240 x 190
CS350	360/95	-	360	180	19,5	620	850 x 240 x 190

\* TEHMA SA reserves the right to make modifications in characteristics and function at any time without previous notice.



# SP400

## HYDRAULIC SPLITTER

TEHMA SP400 Concrete and rock splitter represents the state of art for tools of this kind. Activated by one single operator, demolishes easily and quickly ensuring clean operations without dust and mud, but above all without noise.



- 1 Maximum precision and controllability of the tool in any position thanks to the bidirectional cam
- 2 Ergonomic handle for a better grip in any condition
- 3 Inner carbide layer for better resistance to high pressure and reduced friction
- 4 High quality steel wedges to ensure reliability and durability
- 5 Cylinder and components in aeronautical grade alloy
- 6 Splitting direction controllable by the handle

## CONCRETE AND ROCK

Its low weight, combined with its extreme power and friendly use, make it ideal for two uses:  
as rock splitter, for crushing large stones encountered along an excavation or during tunneling.

As concrete burster, for demolish large-thickness structures, as pillars or foundations, quickly and accurately, without generating vibrations and by limiting noise and dust.



NO  
VIBRATIONS



NO  
NOISE



NO  
DUST



GREEN  
PHILOSOPHY



# HYDRAULIC SPLITTING

Rock and concrete have a low tensile strength, therefore, by applying the hydraulic force to a wedge, it is possible to demolish large portions of material in a few seconds and without incurring in negative aspects such as noise, vibration and dust. The hydraulic splitting thus ensures, quiet and cost-effective interventions by means of a compact and easy-to-transport equipment.



1) On the object to be demolished, a hole is drilled to a specified diameter and depth using a rock drill or a core drill with diamond tool.

2) The splitter cylinder is inserted into the hole with the central wedge in a retracted position.



3) The operator directs the rear handle depending on the desired splitting direction and then activates the tool with the control cam.

4) The hydraulic pressure forces the wedge between the two counter-wedges, pressing them against the walls of the drilled hole until the force discharged exceeds the strength of the material and generates a crack.



5) The process is repeated until the whole structure is broken into sections, varying in size depending on the operator's needs and equipment, ready to be removed and disposed of.

## USING SIMULTANEOUSLY

If the object to be demolished is particularly large and hard or the highest precision is required to keep intact a part of the structure two or more splitting cylinders

SP400 can be used simultaneously. PP700 and PP600 TEHMA power packs can operate up to 3 tools simultaneously by means of the MM30 module.



## USES

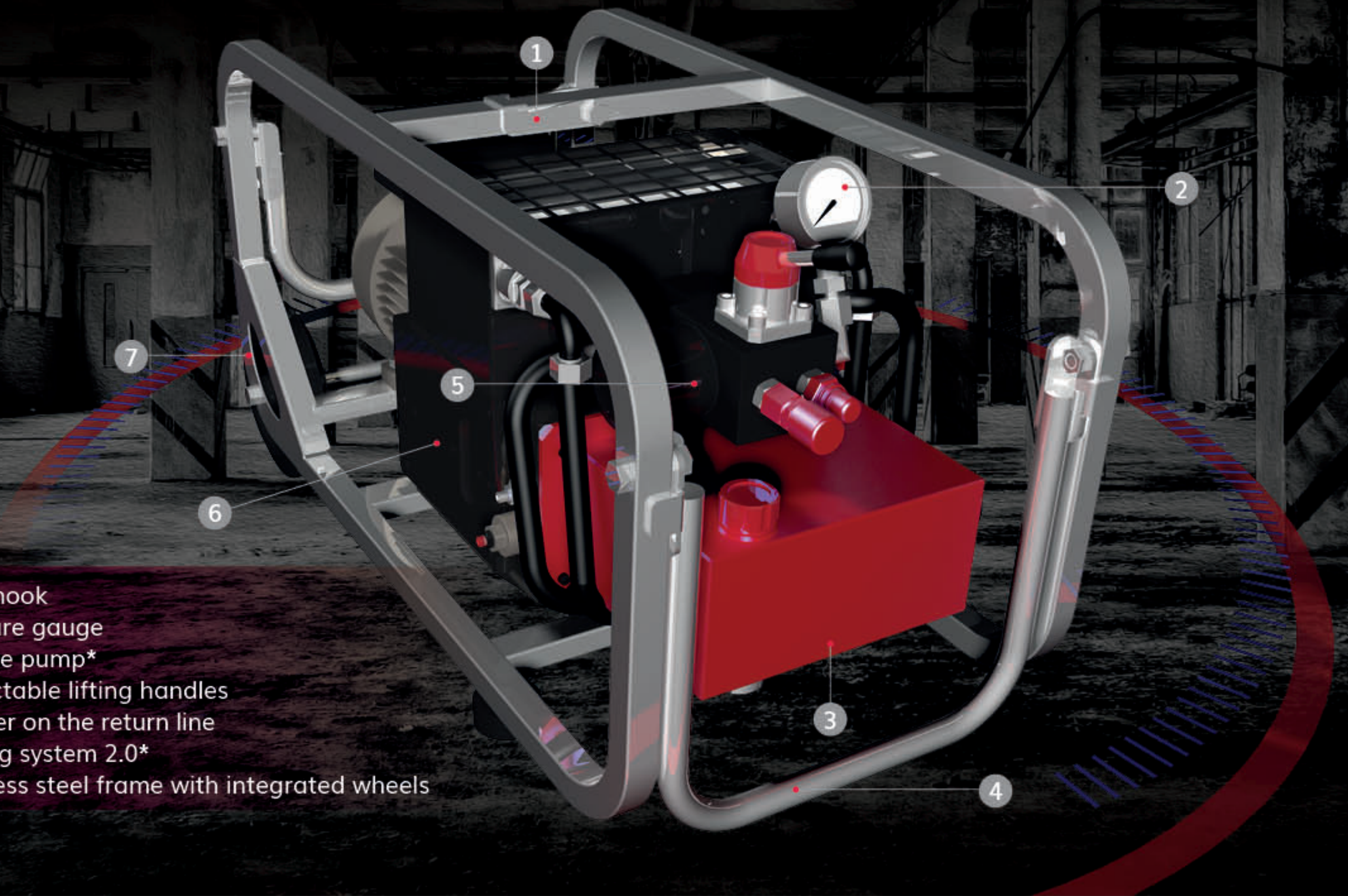
- Demolition of large-thickness concrete structures (such as foundations, floor slabs, stairways, plinths, pillars, bridge decks, bridge abutments, retaining walls).
- Demolition of large rocks resulting from excavations and trenches, mines enlargements, tunneling or resulting from previous processes.
- Wherever is important to intervene quickly and cleanly without generating dust (hospitals, data centers, production departments of companies).
- For any demolition in respect of noise level during the whole day (condos, offices, schools).
- Demolitions of structures particularly vulnerable to vibrations and percussions (historical buildings, luxury apartments, structures that could fall down).
- Wherever for reasons of space or transportability is impossible to use bigger and heavier machineries (upper floors, aerial platforms or in confined spaces such as basements).
- Interventions in presence of water and underwater demolitions.
- In quarries for the production of natural stone blocks production without resorting to blasting.
- U.S.A.R. use (Urban Search and Rescue) where it is necessary to remove large stones or rubble caused by earthquakes, floods and explosions due to gas leaks.

	Splitting force theoretical (t)	Splitting distance (mm)	Required drill hole diameter (mm)	Minimal drill hole depth (mm)	Weight (kg)	Pressure (bar)	Dimension L x W x H (mm)
SP400	375	17	45-50	440	23,5	620	1020 x 195 x 195

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# PP700 POWER PACK



- 1 Load hook
- 2 Pressure gauge
- 3 2-stage pump\*
- 4 Retractable lifting handles
- 5 Oil filter on the return line
- 6 Cooling system 2.0\*
- 7 Stainless steel frame with integrated wheels

## 2 ENGINES AVAILABLE

The unit is available with two different motors, a versatile 3Hp single-phase electric motor, ideal for indoor demolition as it can be plugged to a traditional 230V/110V household power, or a 5Hp gasoline engine for using outdoor.

Fitted with the TEHMA MM30 multiplier module, can run up to 3 SP400 Splitting cylinders simultaneously or 2 cylinders and 1 Multi Shear equipped with CC300 or CS350 jaws at a time.

### \* 2-STAGE PUMP

The innovative two-stage pump is a further element of distinction of the unit and ensures performance well above the category. This allows to speed up to

the maximum the tools connected and significantly improve the work rate and consequently the productivity.

### \* COOLING SYSTEM 2.0

The high efficiency cooling system 2.0 drastically contrasts the oil overheating and cuts it down by about 60%, compared to ordinary power units on the market.

Ensuring maximum performance of the power pack, also in the hottest climates and a better use of the tools connected even with the more demanding and prolonged applications.

	Flow at 1' stage (L)	Flow at 2' stage (L)	Power (kW)	Motor	Weight (kg)	Pressure (bar)	Dimension L x W x H (mm)
PP700 E	9	1,5	2,2	Electric single-phase 230V (Available at 110V or Tree-phase)	59,5	Adjustable up to 700	850 x 420 x 460
PP700 S			3,6	Gasoline Honda GX160	57	Adjustable up to 700	850 x 420 x 460
PP600 E	5,4	1,2	2,2	Electric single-phase 230V (Available at 110V or Tree-phase)	42,5-46,5* (*with cooling system)	Adjustable up to 700	520 x 360 x 500
PP600 H	5,4	1,2	2,2	Hydraulic Motor (Flow 30-45 L/min - 150/200 bar)	30,5	Adjustable up to 700	520 x 360 x 500

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# PP600 POWER PACK

TEHMA PP600 is the perfect choice between reliability and simplicity and is the best tool for industrial applications.

Can be combined with the multifunctional trolley TR200/SK200.

## 2-STAGE PUMP

Its two-stage pump doubles speed and minimizes the downtime when approaching and reopening the blades, in this way cutting speed/frequency and productivity are significantly increased.

On demand, can be equipped with a dual fan cooling system able to always keep the maximum temperature under control.



- Telescopic boom extendable to three positions **1**
- The balancer neutralizes the weight of the tool **2**
- Adjustability to 360° **3**
- Arms can be extended for maximum stability **4**
- Large wheels to nimbly overcome stairs and debris **5**
- Adjustable handles for ease of movement **6**
- Folding arm makes transport easy **7**

## TR200-SK200 TROLLEY E SUSPENSION KIT

Agile and robust, the TEHMA TR200 Trolley is not afraid of stairs and debris.

Thanks to large wheels and a low weight it is possible to carry the equipment easily and in COMPLETE AUTONOMY.

Equipped with the TEHMA SK200 Suspension kit, the trolley can be quickly transformed into a highly functional mobile workstation, allowing to work with minimum effort during long periods.



# ACCESSORIES AND SPARE PARTS



TR200



SK200

TR200	Trolley
SK200	Suspension kit with balancer



MM30

HH50	High pressure hoses 5m - Ø 3/8"
HH100	High pressure hoses 10m - Ø 3/8"
MM30	Three channels multiplier module



SJ - CC300



SJ - MS250



SJ - CS350



SJ - GS170

SJ - CC300	Spare jaws for CC300
SJ - MS250	Spare jaws for MS250
SJ - CS350	Spare jaws for CS350
SJ - GS170	Spare jaws for GS170



CT - CC300



MI - MS250



GB - GS170



CW-SP400

CT - CC300	Spare tips for CC300
MI - MS250	Spare metal insert for MS250/GS170
GB - GS170	Guide blade for GS170
CW-SP400	Spare counter wedges for SP400



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