

# 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 threaded attachment point for chains
- 5 Extremely hard interchangeable steel tip
- 6 Ergonomic handle for a better grip in any condition

## FOUR 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 4 different tools: CC300, MS250, GS170 and CS350.

Extremely versatile and functional, it is an indispensable partner for demolition inside inhabited buildings or densely populated areas and the right tool to complete the TEHMA SP400 / SP600 hydraulic concrete and rock splitters.



# FOUR DIFFERENT CONFIGURATIONS

CC300 Concrete crusher / MS250-GS170 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

- Demolition where is necessary preserving the structure/building integrity avoiding dangerous vibrations (historical buildings, luxury apartments, structures that can fall).
- Wherever it 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).
- 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 / GS170 Shear with blade guide

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.
- Intervention in the presence of water and underwater demolitions.

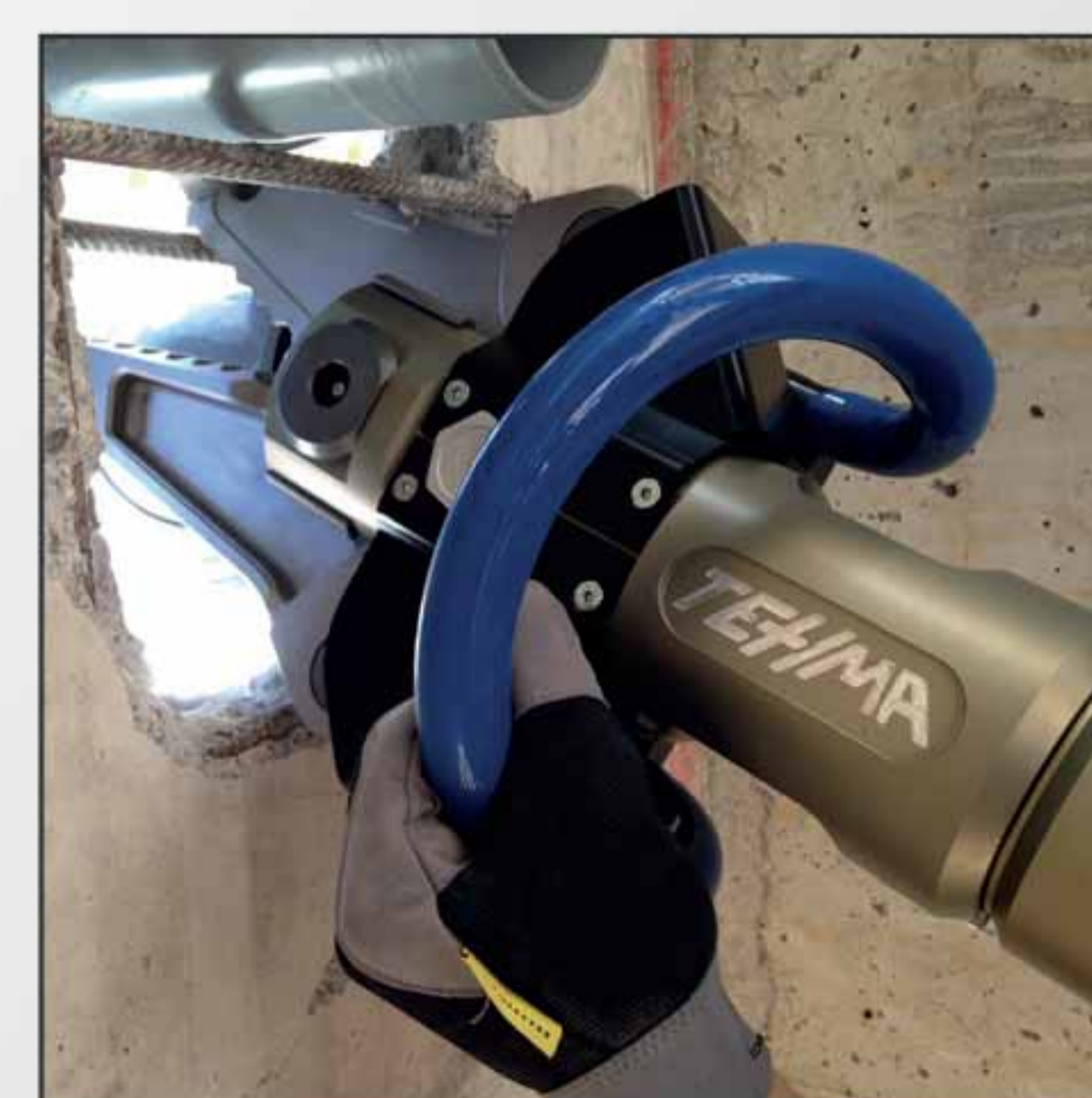


## CS350 Combi shear (spreader & cutter)

Easily opens gaps through reinforcements and previously demolished structures.

### USES

- Quick separation of blocks of reinforced concrete structures previously demolished (by means of CC300 concrete crusher or SP400 / SP600 hydraulic concrete and rock splitters).
- Remove radiators of door frames from walls.
- Cutting metal sheets and other metal structures.



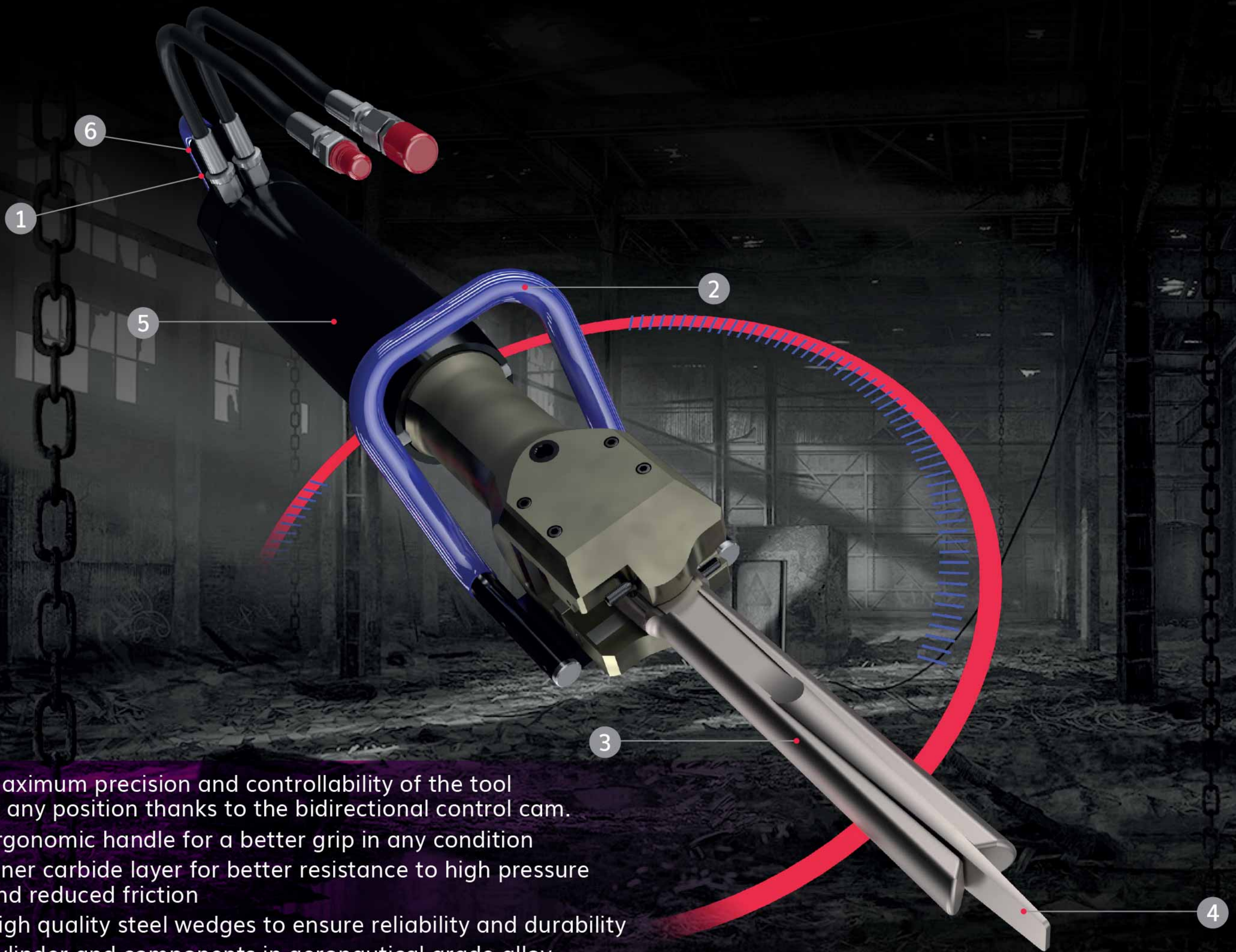
	Cutting/separation force (kN)	Demolition force (kN)	Mouth opening (mm)	Mouth depth (mm)	Weight (kg)	Pressure (bar)	Dimension L x W x H (mm)
CC300	-	101	300	150	22,5	600	849 x 304 x 190
MS250	450	-	180	150	20,5	600	811 x 242 x 190
GS170	450	-	174	135	20,5	600	819 x 242 x 190
CS350	360/95	-	362	180	19,5	600	849 x 242 x 190

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

# SP400-SP600

## HYDRAULIC SPLITTER

TEHMA SP400 / SP600 Concrete and rock splitters represent the state of the art for tools of this kind. Activated by one single operator, they demolish easily and quickly ensuring clean operations without dust, percussions, but above all without noise and vibrations.



- 1 Maximum precision and controllability of the tool in any position thanks to the bidirectional control 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 defined by the orientation of the rear handle

## CONCRETE AND ROCK

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

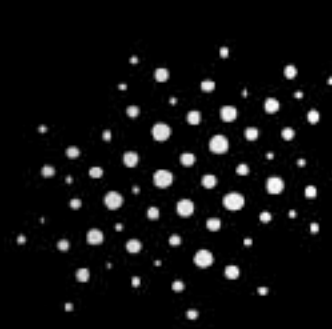
As concrete burster, for demolish large-thickness structures, as pillars or foundations, quickly and accurately, without generating vibrations and by limiting noise and dust.



NO  
VIBRATIONS



NO  
NOISE



NO  
DUST



NO  
BLAST



GREEN  
PHILOSOPHY

# HYDRAULIC SPLITTING

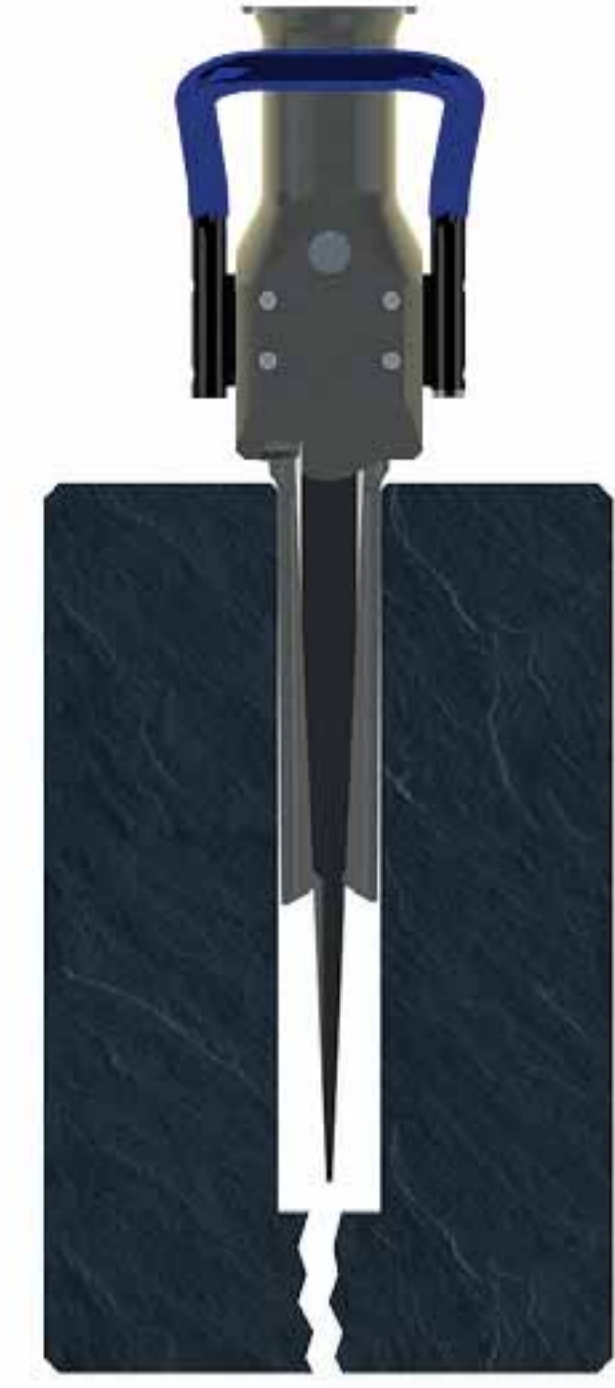
Rock and concrete have a low tensile strength, therefore, by applying the hydraulic force to a wedge, it is possible to demolish large portions of material in a few seconds and without incurring in negative aspects such as noise, vibration and dust. The hydraulic splitting thus ensures targeted, silent 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 orients 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.

## SIMULTANEOUS USE

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 splitters SP400 / SP600 TEHMA

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



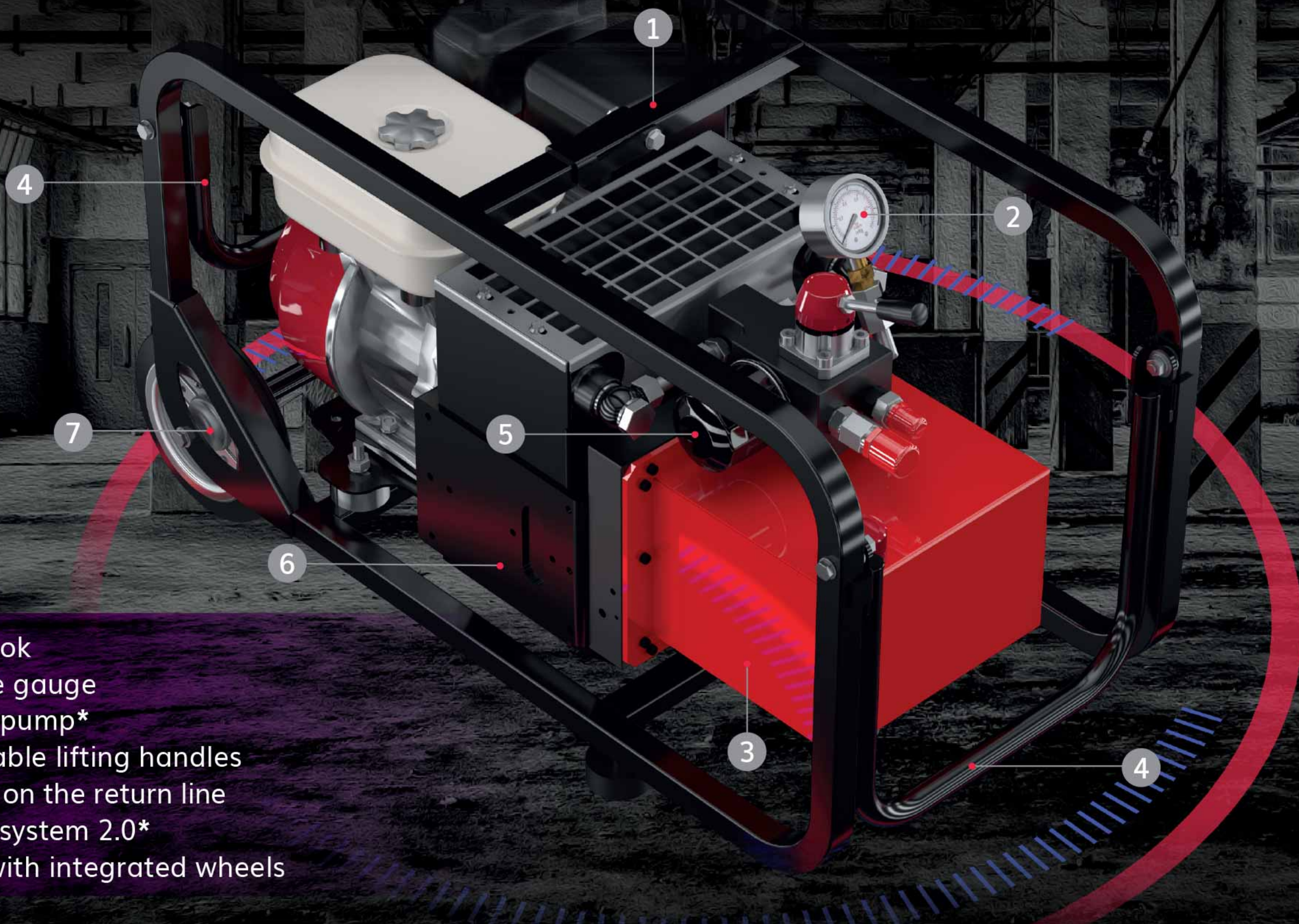
## USES

- Demolition of large-thickness concrete structures (such as building foundations, floor slabs, stairways, plinths, pillars, bridge decks, bridge abutments, retaining walls, column and beams).
- Demolition of large rocks in trench works, works and transversal passages in tunnels, extension works in underground mines, works on pipelines under pressure, works for the construction of foundations and basements of buildings and for the secondary cutting of rocks.
- Wherever it 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 can fall).
- Wherever for reasons of space or transportability is impossible to use bigger and heavier machineries (upper floors, aerial platforms, in confined spaces such as basements or near gas, water & sewer mains).
- Interventions in presence of the water and underwater demolitions.
- In quarries to produce natural stone blocks (marble, granite, sandstone) without resorting to blasting, ensuring greater safety and less waste of material.
- 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 (Kn)	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	3620	17	45-48	440	23,5	600	1032 x 191 x 195
SP400-SW	6080	10	35-36	440	23	600	1032 x 191 x 195
SP600	8650	15	45-48	640	36	600	1328 x 191 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 Frame with integrated wheels

## 2 MOTORS AVAILABLE

The unit is available with two different motors, a versatile 2,2 kW single-phase electric motor, ideal for indoor demolition as it can be plugged to a traditional 230V/110V (50Hz) - 120V (60Hz) household power, or a 5Hp

gasoline engine for using outdoor. Fitted with the TEHMA MM30 multiplier module, can run up to 3 TEHMA SP400 / SP600 splitting cylinders simultaneously.

### \* 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 without oil (kg)	Pressure (bar)	Dimension L x W x H (mm)
PP700 E	9	1,2	2,2	Electric single-phase 230V/50Hz (Available at 110V/50Hz-120V/60Hz or three-phase)	58,7	Adjustable up to 700	860x400x495
PP700 S			3,6	Gasoline Honda GX160	56,2		
PP600 E/EC* *with cooling system			2,2	Electric single-phase 230V/50Hz (Available at 110V/50Hz-120V/60Hz or three-phase)	42,5/46,5		520/534x360x514
PP600 H	5,4	1,2	7,7	Hydraulic Motor (Required flow rate 30-45 l/min/150-200 bar)	30,5	Adjustable up to 700	522x360x514
PP600 A			3	Pneumatic (Max air consumption 215m3/h at 7 bar)	38		520x360x517
PP600 S			3,6	Gasoline Honda GX160	44		520x395x515

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# PP600 POWER PACK

TEHMA PP600 is the perfect choice between reliability and simplicity and is the best tool for industrial, marine, mining, rescue and recycling applications thanks to its compact size.

As the PP700 unit, it can be combined with the TEHMA TR200 / SK200 multifunctional trolley.

## 4 MOTORS AVAILABLE

The unit is available with four types of motor, the versatile single-phase electric motor for indoor demolition, the gasoline motor for outdoor demolition, the pneumatic motor to connect to a compressor or necessary when working in in closed areas at risk of explosion and the hydraulic motor when only the hydraulic source is available.



### \* 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.

### \* COOLING SYSTEM

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



## TR200-SK200 TROLLEY / SUSPENSION KIT

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

	Max. working height (cm)	Max. working length (cm)	Max. load capacity (kg) (TR200)	Max. load capacity (kg) (SK200)	Weight TR200+SK200 (kg)	Max dimension (TR200+SK200) L x W x H (cm)
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TR200 SK200	170	160	50	30	54,5	130x230x210
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- 1 Telescopic boom extendable to three positions
- 2 The balancer neutralizes the weight of the tool
- 3 Adjustability to 360°
- 4 Arms can be extended for maximum stability
- 5 Large wheels to nimbly overcome stairs and debris
- 6 Adjustable handles for ease of movement
- 7 Folding arm makes transport easy

# ACCESSORI AND SPARE PARTS



TR200



SK200

TR200	Trolley
SK200	Suspension kit with balancer
BAL23	Balancer



HH50/HH100



MM20 - MM30

HH50	High pressure hoses 5m - Ø 3/8"
HH100	High pressure hoses 10m - Ø 3/8"
MM20 - MM30	Outlet 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/SP600



MW-SP400/SP600

CT - CC300	Spare tips for CC300
MI - MS250	Spare metal insert for MS250/GS170
GB - GS170	Guide blade for GS170
MW - SP400	Central wedge for SP400
CW - SP400	Counter wedge for SP400
MWS - SP400 - SW	Central wedge for SP400 - SW
CWS - SP400 - SW	Counter wedge for SP400 -SW
MW - SP600	Central wedge for SP600
CW - SP600	Counter wedge for SP600

Rev.07 2021



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