HYDRAULIC SPLITTER

CONTROLLED SPLITTING. MINIMAL IMPACT

Extreme splitting force in a compact, handheld hydraulic tool designed to tackle demanding concrete and rock breaking operations with minimal impact on the surrounding environment — where conventional solutions reach their limits.

- NO VIBRATIONS
- NO BLASTING
- LOW NOISE
- LOW DUST

TEHMA
HIGH PRESSURE TOOLS

WHEN CONVENTIONAL SOLUTIONS REACH THEIR LIMITS

When vibration, noise and dust need to be kept to a minimum, when blasting cannot be used, or when access limits the use of large or heavy equipment, TEHMA Hydraulic Concrete and Rock Splitters provide extreme splitting force with controlled fracture direction.

Extreme splitting force for fast, productive concrete and rock breaking while minimizing the impact on the surrounding environment.

BLASTING RESTRICTIONS

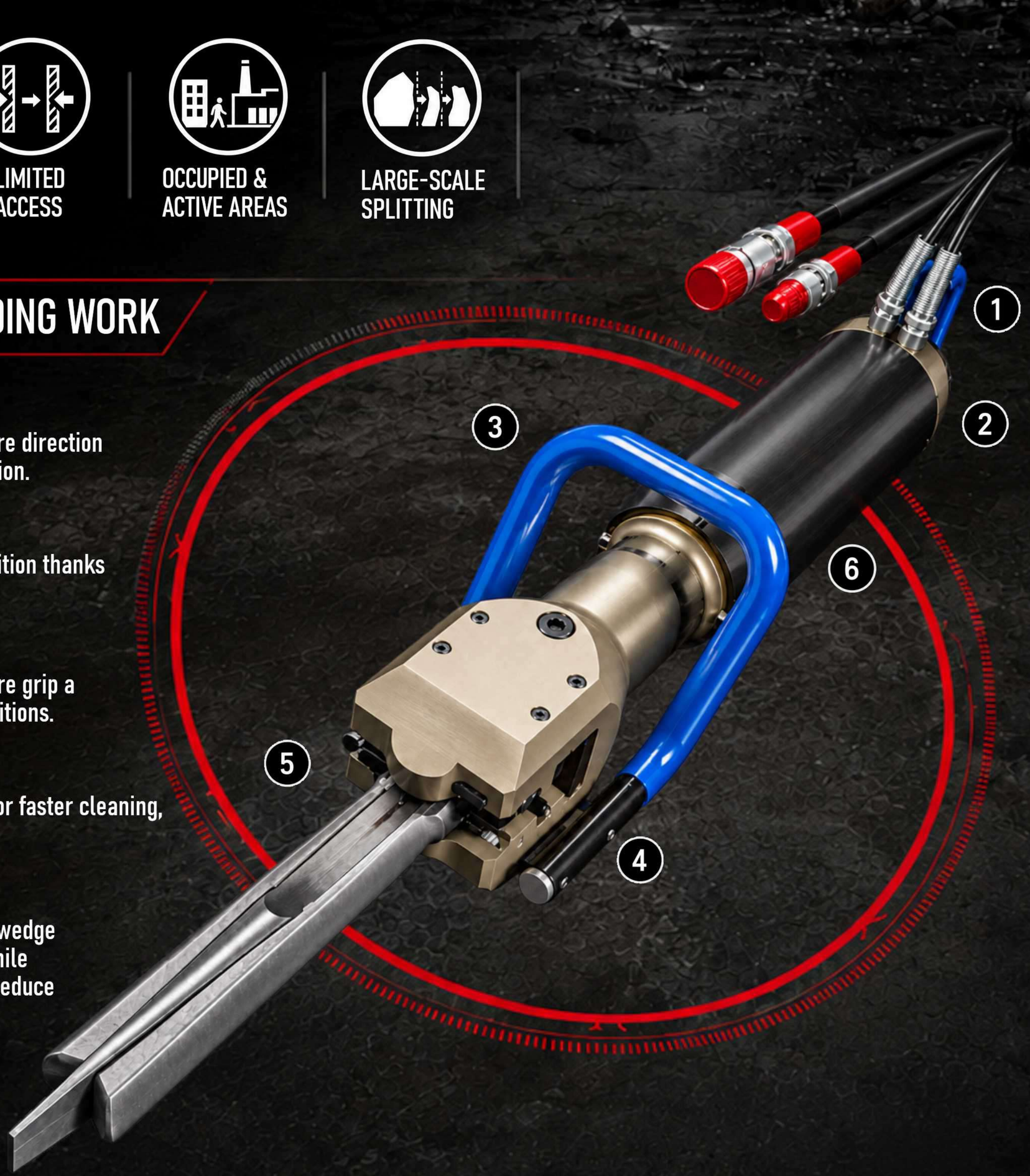
SENSITIVE STRUCTURES

LIMITED ACCESS

OCCUPIED & ACTIVE AREAS

LARGE-SCALE SPLITTING

ENGINEERED FOR DEMANDING WORK



01 CONTROLLED SPLITTING DIRECTION
Rear handle orientation allows the fracture direction to be controlled according to the application.

02 BIDIRECTIONAL CONTROL
Maximum tool control in any working position thanks to the bidirectional control cam.

03 DESIGNED FOR ONE-PERSON OPERATION
Ergonomic handle design provides a secure grip a nd easy handling in different working positions.

04 OPEN-ACCESS HEAD
Open head design provides easy access for faster cleaning, inspection and wedge replacement.

05 GUIDED WEDGE SYSTEM
An integrated guide supports the central wedge during demanding splitting operations, while specially designed counter wedges help reduce friction under high load.

06 HIGH-GRADE ALUMINIUM ALLOY BODY & COMPONENTS
High strength with minimum weight.

BUILT TO PERFORM DESIGNED FOR THE TOUGHEST SITUATIONS

TEHMA develops high-performance handheld hydraulic tools for professionals working in demanding conditions.

We design solutions for situations where conventional methods are no longer the best choice, enabling professionals to work with greater effectiveness, precision, productivity and reliability.

TEHMA
HIGH PRESSURE TOOLS

EXTREME FORCE.
MULTIPLE APPLICATIONS

High-performance hydraulic splitters for controlled breaking of concrete and rock, from construction and demolition to quarrying, tunnelling and underground operations.

HYDRAULIC SPLITTING
SP400 / SP400-SW / SP600
CONCRETE & ROCK SPLITTERS

SP400 and SP400-SW share the same hydraulic body, while SP600 delivers extreme splitting force for the most demanding applications.

ONE BODY. TWO WEDGE CONFIGURATIONS.
UP TO 8,110 kN



CONTROLLED CONCRETE DEMOLITION

Demolition of reinforced and unreinforced concrete, from floors and confined structures to massive foundations, columns and other thick concrete elements — without percussive action and with vibration, noise and dust kept to a minimum.



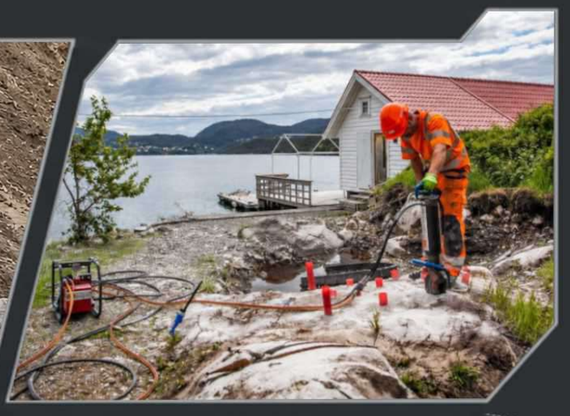




ROCK SPLITTING

Rock splitting for excavation, trenching, tunnelling and secondary splitting operations, without blasting and using compact equipment suitable for confined spaces and difficult-to-access areas.







TYPICAL CONCRETE APPLICATIONS

- FLOORS & SLABS
- FOUNDATIONS
- WALLS & STRUCTURES
- PILE HEAD BREAKING
- PILLARS & BEAMS
- LARGE CONCRETE STRUCTURES
- CONTAMINATED CONCRETE REMOVAL

TYPICAL ROCK APPLICATIONS

- ROCK EXCAVATION
- TRENCHING
- BOULDER BREAKING
- TUNNELLING
- UNDERGROUND MINING
- NATURAL STONE QUARRYING

WHERE IT MAKES THE DIFFERENCE

PRESERVE STRUCTURES

Percussion-free demolition with vibration kept to a minimum where surrounding structures must be preserved, including historical buildings, vulnerable structures and other sensitive construction environments.

FAST & CLEAN INTERVENTION

Low-dust, low-noise demolition for hospitals, data centres, production facilities, offices, schools and other environments where work needs to be carried out quickly while minimizing disruption.

LIMITED ACCESS & PORTABILITY

Compact, handheld hydraulic power that can be transported to upper floors, confined spaces and difficult-to-access areas where larger and heavier demolition equipment cannot operate.

SPECIAL APPLICATIONS

U.S.A.R. & MINE RESCUE

Urban Search and Rescue and mine rescue operations where power and portability allow rescuers to work directly among debris and large boulders, including areas that are difficult to access with larger equipment.

UNDERWATER OPERATIONS

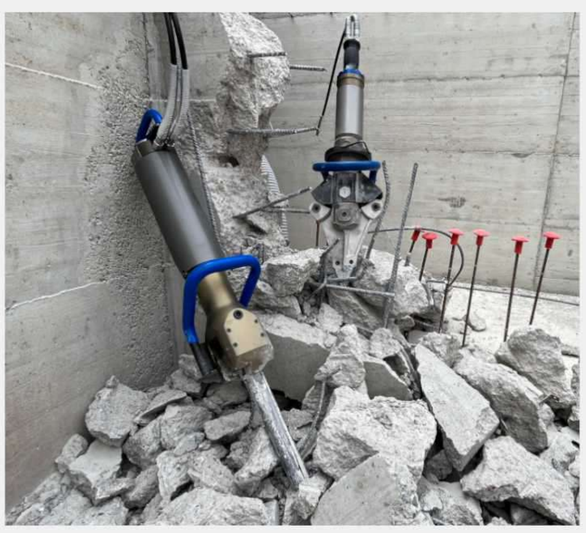
TEHMA Hydraulic Splitters can also be used for demanding underwater concrete and rock demolition operations, maintaining high force and precision even in challenging operating conditions.

SIMULTANEOUS USE
MULTIPLE SPLITTERS. COMBINED FORCE.



For particularly large or demanding structures or boulders, multiple TEHMA Hydraulic Splitters can be operated simultaneously, increasing overall splitting capability while maintaining control over the fracture process. PP600 and PP700 power packs can operate up to three splitters simultaneously using the MM30 module.

SPLIT. CUT. SEPARATE.
A COMPLETE SOLUTION FOR REINFORCED CONCRETE



TEHMA Hydraulic Splitters can be combined with the CS350 Combi Shear for the most demanding reinforced concrete operations. The splitters progressively fracture the concrete in a controlled manner, while the CS350 cuts and separates the exposed reinforcement, allowing the structure to be reduced into manageable sections for subsequent removal.

HOW HYDRAULIC SPLITTING WORKS

Rock and concrete can withstand very high compressive forces but are relatively weak under tension. TEHMA Hydraulic Splitters exploit this principle by applying enormous hydraulic force from inside a pre-drilled hole, progressively generating a controlled fracture without the need for percussive action.

01 — DRILL
Drill a hole to the required diameter and depth according to the splitter type used.

02 — POSITION & ORIENT
Insert the wedge set into the hole with the central wedge retracted and orient the rear handle according to the required splitting direction.

03 — SPLIT
Hydraulic pressure drives the central wedge between the counter wedges, generating lateral force against the walls of the hole until the material fractures.



Repeat the process to progressively break the material into manageable sections.

// CHOOSE THE RIGHT SPLITTER

▼ MOST SUITABLE ▽ SUITABLE

APPLICATION	SP400-SW	SP400	SP600
CONCRETE DEMOLITION			
Plain & lightly reinforced concrete		▼	▼
Heavily reinforced concrete		▽	▼
Confined spaces		▼	▽
Stone & concrete walls / openings		▼	▼
Pile head breaking		▼	▼
Secondary splitting of concrete		▼	▽
Underwater demolition		▼	▼

APPLICATION	SP400-SW	SP400	SP600
ROCK DEMOLITION			
Rock removal	▼	▽	▼
Tunnel cross passages	▼	▽	▼
Tunnel enlargement	▼	▼	▽
Secondary rock splitting	▼	▼	▼
Rock splitting in trench works		▽	▼
Underground mining	▼	▽	▽
Pipe jacking / microtunnelling	▼	▼	

APPLICATION	SP400-SW	SP400	SP600
NATURAL STONE QUARRYING			
Granite	▼		▼
Marble	▼		
Sandstone		▼	
RESCUE			
U.S.A.R.	▼	▼	▼
Mine rescue	▼	▽	▼

//POWER WHERE YOU NEED IT

TEHMA power packs provide the hydraulic power required to operate the splitter range, with different configurations available to match the working environment and application.

PP600
COMPACT & VERSATILE

Compact and versatile power pack for a wide range of professional applications, available with different motor configurations.



PP700
HIGH PERFORMANCE

High-performance cooling system and high-flow hydraulic pump for demanding professional applications.

UP TO 9 L/MIN

High flow rate for faster splitter operation and increased productivity.



Model	Theoretical splitting force (kN)	Splitting distance (mm)	Required drill hole diameter (mm)	Minimum drill hole depth (mm)	Weight (kg)	Pressure (bar)	Dimensions L x W x H (mm)
SP400-SW	6350	10	35-36	440	23	600	1032 × 191 × 195
SP400	3740	17	45-48	440	23.5	600	1032 × 191 × 195
SP600	8110	16	45-48	640	36	600	1328 × 191 × 195

Model	Flow at 1st stage (L/min)	Flow at 2nd stage (L/min)	Power (kW)	Motor	Weight (kg)	Pressure (bar)	Dimensions L x W x H (mm)
PP700 E	9	1.2	2.2	Electric single-phase 230V (Available in 110V-120V or three-phase versions)	58.7	Adjustable up to 700	860 × 400 × 495
PP700 S			3.6	Gasoline Honda GX160	56.2		860 × 400 × 495
PP600 (E/HC) (*With cooling system)	5.4	1.2	2.2	Electric single-phase 230V (Available in 110V-120V or three-phase versions)	42.5/46.5	Adjustable up to 700	520/534 × 360 × 514
PP600 H			7.7	Hydraulic (Required flow rate 30-45 l/min / 150-200 bar)	30.5		522 × 360 × 514
PP600 A			3	Pneumatic (Air consumption: 60–180 m³/h at 4–6 bar / max. 215 m³/h at 7 bar)	38		520 × 360 × 517
PP600 S			3.6	Gasoline Honda GX160	44		520 × 395 × 515

* TEHMA SA reserves the right to modify the specifications and functions of its equipment at any time without prior notice.

READY FOR THE JOB
Find the right configuration for your application.
CONTACT TEHMA OR YOUR LOCAL DEALER

TEHMA
HIGH PRESSURE TOOLS

TEHMA SA
Vicolo Concordia 1 - 6932 Lugano Breganzona - SWITZERLAND
Tel. +41 (0)91 210 31 82
info@tehma.ch - www.tehma.ch