

# HYDRAULIC BREAKER TR-F SERIES

**SOOSAN**  
HEAVY INDUSTRIES

**Fewer Components,  
Less Maintenance**



☒ Integrated Power Control    ☒ Auto Blank Hammering System  
(SB147/200 Only)

## **KEY BENEFITS**

- High Power to Weight Ratio
- IPC&ABH System allows you to choose 3 Different Working Modes
- Proven Design for Performance
- Powerful Impact Force with less oil flow and pressure
- HARDOX Housing for High Durability



# SOOSAN

## Pride of SOOSAN

Worldwide acceptance for its proven design  
and reliable performance

## ABOUT SOOSAN

As one of largest manufacturers of hydraulic breaker, SOOSAN Heavy Industries Co., Ltd, has been committed to the development and manufacturing of quality products and product support since its establishment in 1984.

Since the first hydraulic breaker rolled out in 1984, the ingenious and patented design of SOOSAN hydraulic breakers have received recognitions for its superb performance from worldwide customers.

- State-of-the-art manufacturing processes and following best practices in material sourcing, machining, heat treatment, assembly, and final testing yields products of unsurpassed quality and durability.
- Global market leader recognized as a performance innovator in efficient product design and field-proven dependability.



In House Heat Treatment



Robot Welding Automation



Super Grinding Machine





**High efficiency**

**High performance**

**Less weight**

**Simple structure**

## Features & Benefits ;

### **Proven design for performance and reliability**

SB hydraulic breakers have the most efficient and simple structure with its commitment to the basics. SB hydraulic breakers have gained worldwide acceptance in the past three decades and its breaker design is a subject of benchmarking around the world.

### **High power to weight ratio**

Due to high quality materials and advanced technology, higher percussive performance to weight ratio is guaranteed.

### **Fewer components, less maintenance**

Simple structure of TR-F series enables maintenance cost to be reduced.

### **Improved vibration dampening**

Fully isolated power cell with premium quality urethane cushions and wear plates absorb shock and vibration resulting in reduced wear.

### **Gas and oil percussion mechanism**

Compressed nitrogen gas in the back head greatly contributes to powerful impact force with less oil flow and pressure.

### **HARDOX reinforced housing**

The lower part of housing is reinforced by HARDOX for maximum durability.

### **Facilities and quality control with SOOSAN know-how and experience**

All component machining and final grinding are conducted on the latest precision SPC equipment, and carefully monitored for precise tolerances. In the assembly process, only the latest generation robot welding machines are used.

### **IPC & ABH system(SB147, SB157, SB200 TR-F only)**

Integrated Power Control and Anti-Blank Hammering system allows operator to choose three different working mode. The automatic Anti-Blank Hammering function (shut-off) can be switched on or off.





## TR-F Line-up



## Specifications

Description	Unit	SB50 TR-F	SB60 TR-F	SB70 TR-F	SB81 TR-F	SB100 TR-F
Operating weight	kg	973	1330	1544	1830	2065
Carrier weight	ton	11 ~ 16	15 ~ 18	16 ~ 21	18 ~ 26	25 ~ 30
Height	mm	2325	2592	2682	2813	3063
Required oil flow	ℓ / min	80 ~ 110	90 ~ 120	100 ~ 150	120 ~ 180	150 ~ 210
Operating pressure	bar	150 ~ 170	150 ~ 170	160 ~ 180	160 ~ 180	160 ~ 180
Impact rate	bpm	350 ~ 700	350 ~ 650	350 ~ 600	350 ~ 500	300 ~ 450
Chisel diameter	mm	100	125	135	140	150

※ The above specifications are subject to change without prior notice.





SB121 TR-F



SB130 TR-F



SB147 TR-F



SB157 TR-F



SB200 TR-F

**SB121 TR-F**

2781  
28 ~ 35  
3215  
180 ~ 240  
160 ~ 180  
300 ~ 450  
155

**SB130 TR-F**

2996  
30 ~ 45  
3392  
200 ~ 260  
160 ~ 180  
250 ~ 400  
165

**SB147 TR-F**

3314  
28 ~ 45  
3605.5  
200 ~ 260  
160 ~ 180  
250 ~ 350  
165

**SB157 TR-F**

3833  
40 ~ 55  
3736  
210 ~ 290  
160 ~ 180  
200 ~ 350  
175

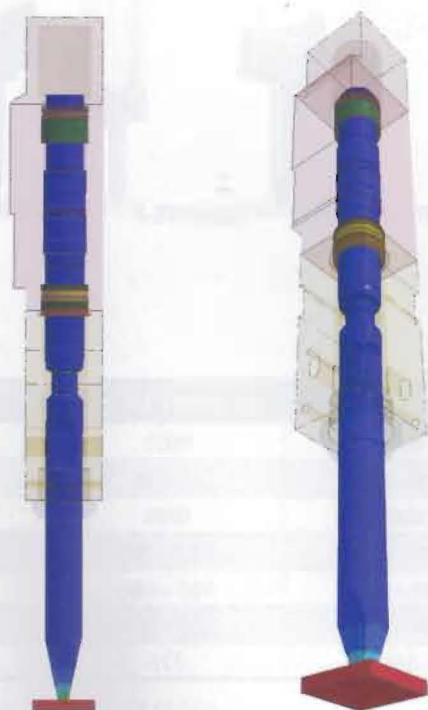
**SB200 TR-F**

6613  
70 ~ 120  
3740  
400 ~ 500  
170 ~ 190  
200 ~ 300  
210



## Impact Power Mechanism 3D Analysis

Keeping dynamical stability through optimum design using 3D software and computer system structural analysis



LS-DYNA user input

Contours of Effective Stress(v-m)

min=0.00158659, at elem# 1164274

max=6.23342, at elem# 69390

max displacement factor=2

PA2002








# Application ;

- Primary and secondary breaking in quarries
- Site preparation, foundation works
- Road construction
- Demolition works, highly reinforced concrete
- Trenching
- Tunneling
- Bench leveling
- General construction works

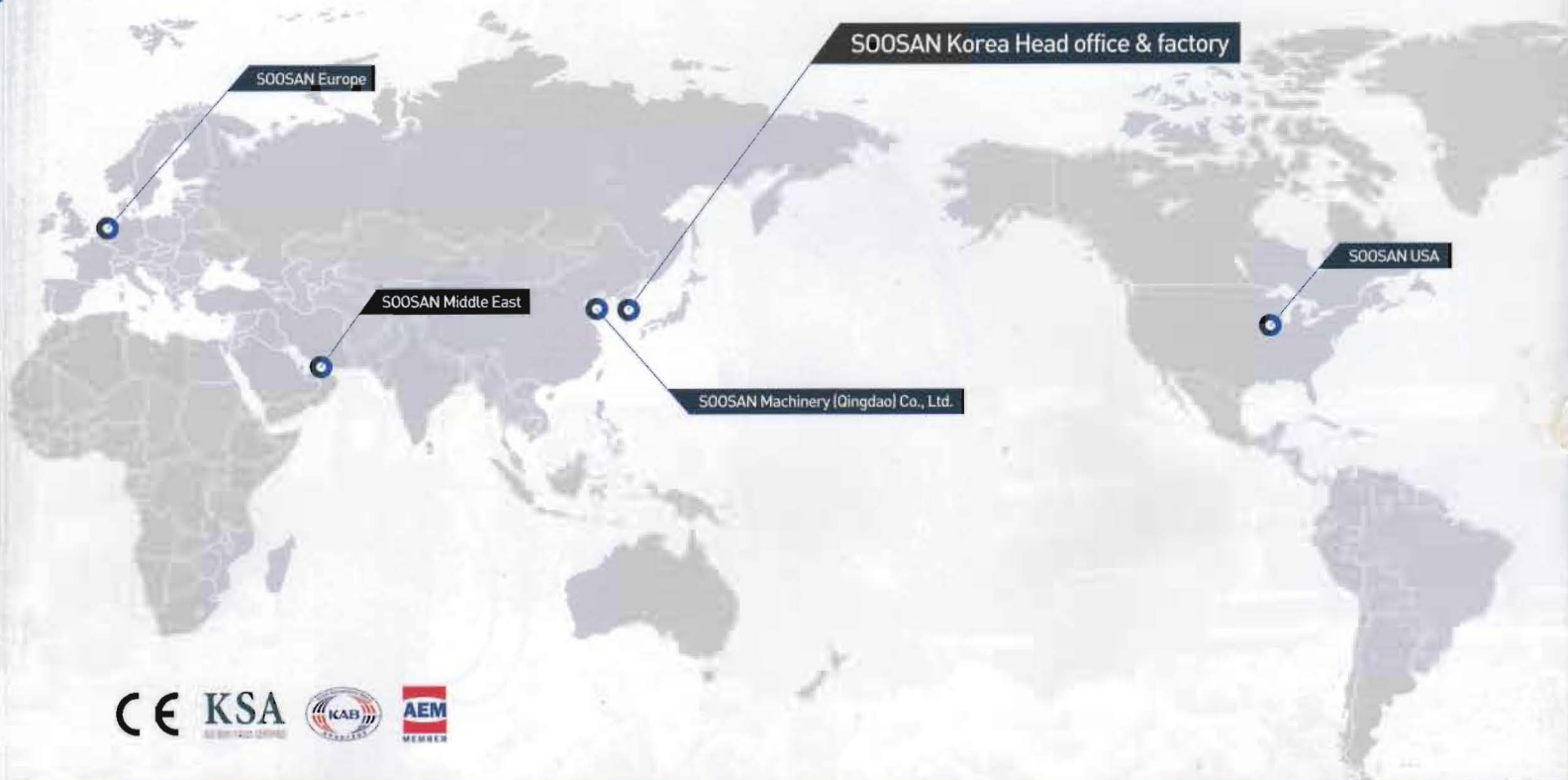


## SOOSAN chisel selection

Thanks to strictly selected raw materials and advanced heat treatment system, we provide you with the most suitable and durable chisels for our breakers to be used on various applications such as trenching, demolition, road construction, quarrying, mining and etc.

	Chisel type	Application
Moil point type		Standard chisel for multi-purpose, general use
Universal type		General demolition work : Masonry, concrete, etc
V-Wedge type		Straight cutting work : Trenching, benching, asphalt, concrete, etc.
H-Wedge type		Cross cutting work : Trenching, asphalt, concrete, etc
Flat type		Impact breaking : Primary and secondary rock breaking, etc

# SOOSAN Global Network



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