

## SRES - DEMSUN C90 CHEMICAL ANCHOR

DEMSUN C90 CHEMICAL ANCHOR is a high performance styrene free epoxy acrylate injection mortar for solid and hollow supports having a short cure time. It is suitable for use in concrete, stone, perforated bricks and cavity blocks in a wide range of applications.



SRES

## SECTION 2- PROPERTIES

- Suitable for rods and reinforcing bars in plain and hollow structures.
- Styrene free and very low odour
- Easy to extrude and to inject.
- Thixotropic, can be applied in vertical and horizontal direction.

## SECTION 3 - APPLICATIONS

- Heavy load-carrying attachments in solid stone and concrete.
- Repair mortar or adhesive mortar for concrete components.
- Attachment of anchor rods, threaded collars, reinforcement bars, profiles etc.
- Medium-load applications in hollow-bricks.
- Fixing of;
  - Wooden constructions
  - Metal constructions
  - Metal profiles
  - Sanitary fittings
  - Pipe connections
  - Projecting roofs
  - Façades
  - Cable trays
  - Railings
  - Staircases
  - Gates
  - Window elements

## SECTION 4- INSTRUCTIONS

### CARTRIDGE USE

- Unscrew the cap of the cartridge
- Screw the mixing nozzle onto cartridge
- Insert the cartridge in the gun
- Remove the mixture until the two components have a homogeneous light grey colour in the nozzle (Avoid using the first 10 ml)

### APPLICATION

- Choose a drill of suitable dimensions depending on the rod to be anchored
- Remove the water and dirt (dust and loose material) with a circular brush and a blower or with air pressure
- The items to be fastened must be clean
- In case the anchor is set in a hollow brick, introduce the sleeve of suitable dimensions (for brick: sleeve 16 mm x 85 mm, and for concrete block: sleeve 16 mm x 130 mm)
- In the case of a solid base material, inject the product from the base of the hole until 2/3 full
- Insert the element to be fastened rotating, if necessary, keep the position with a suitable device
- Unscrew the mixing nozzle and replace the cap

## SECTION 5- PACKAGING

Product	Volume	Package
C90	300ml/ 345ml	12

## SECTION 6- STORAGE AND SHELF LIFE

Store the product in a ventilated place away from direct exposure to sunlight. Keep between +5°C and +25°C. Once the package is opened, it should be used in a month. Shelf life of the unopened original packaging is one year from manufacturing date.

## SECTION 7- SAFETY

- Before injection, verify the expiry date of the product, the support resistance and the ambient temperature. Settings in any subsequent adjustment are only possible during working time.

## SECTION 8- TECHNICAL PROPERTIES

### PHYSICAL PROPERTIES

<b>Basis</b>	: Unsaturated Polyester
<b>Colour</b>	: Light Grey (Component A:beige; Comp. B:black)
<b>Density</b>	: 1,70 kg/l at 20°C

### WORKING AND HARDENING TIMES

<b>Base Material Temperature (°C)</b>	0	5	10	15	20	25	30	35
<b>Working Time</b>	25'	15'	12'	8'	6'	4'	3'	2'
<b>Loading Time</b>	3H	2h	1h30'	1h	45'	30'	20'	15'

### NUMBER OF ANCHORS BY DIAMETER

<b>ANCHOR</b>		
<b>Diameter (mm)</b>	300ml	345ml
8	70/80	80/90
10	40/45	45/50
12	24/27	26/30
16	12/14	14/16
20	5/6	6/7

## PERFORMANCE DATA FOR RODS INTO CONCRETE

Anchor						Resistance	Admissible Loads	
Rod Class 5.8	Drill diameter $\varnothing$	Embedment depth $h_{ef}$	Standard edge distance $C_{cr}$	Standard anchor distance $S_{cr}$	Torque moment $\uparrow T_{inst}$	Characteristic resistance $N_{rk}$	Concrete C20/25	Concrete C20/25
	mm	mm	mm	mm	N.m	Tensile (kN)	Tensile (kN)	Shear (kN)
M8	10	80	80	160	10	12,9	4,3	5,8
M10	12	90	90	180	20	19,8	6,6	9,2
M12	14	110	110	220	40	32,8	10,9	13,4
M16	18	125	125	250	80	44,6	14,9	24,9
M20	24	170	170	340	100	75,8	25,3	39,4

**Safety factor for tension load is 3**

### MECHANICAL CHARACTERISTICS

	Units	Standard	Average Value
Compressive Strength	N/mm <sup>2</sup>	ASTM D695	65
Compressive Modulus	N/mm <sup>2</sup>	ASTM D695	6000