



SUPER OS 480i

SEMI AUTOMATIC
ROTOR SPINNING MACHINE



DISPLAY CONTROL ENABLED



ANDROID

SPINNING SUCCESS...





ABOUT US

Super Group as it stands today, was started way back in 1984 with a vision to become one of the most advanced machinery manufacturer in the field of Textile and General Engineering.

The seeds of development for the group were planted by Mr. A. Thankavel, a natural Technocrat and Inventor, who started his career as a simple Textile Machinery Erection Engineer, to become one of the most successful industrialist in the field of Textile Engineering.

Our successful technological advancement in the manufacturing of Sliver and Apparel yarn making machines for more than two decades, has motivated us towards the development and manufacture of highly advanced Open End Spinning Machine, SUPER OS 480i to target the global markets.

We are an extremely motivated team, having top quality infrastructure, to meet out all the requirements from Research and Development, and maintaining High Quality Production Standards and excelling in Customer Service.



THE NEW 5S CONCEPT



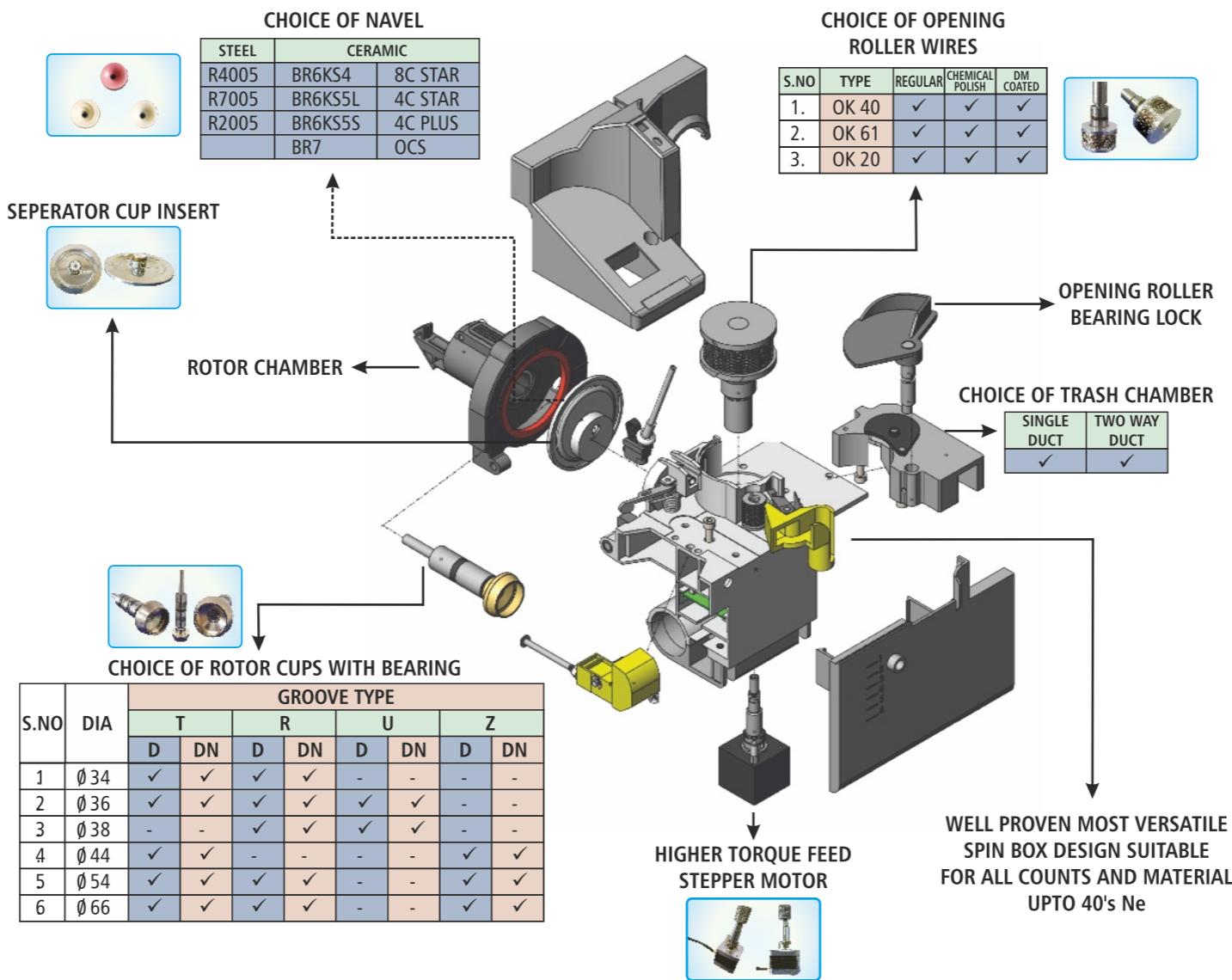
Simple and Sturdy Design
Savings in Capital Investment
Superior Quality Levels
Sustainable Productivity
Savings in Profit

@ THE HEART OF SPINNING



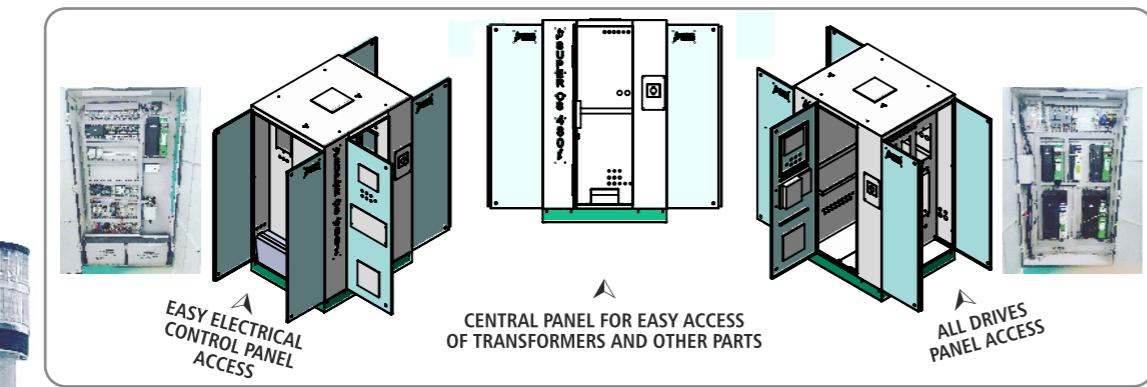
SPIN BOX

- Totally Indigenously Manufactured In House with the latest Systems.
- Spin Box Parts can be easily mounted and removed without the need for any special Tools
- Simplistic Design reduces the machine down times and enables effective utilization of Manpower.
- Independent Stepper Drive Control for Feed Sliver Intake

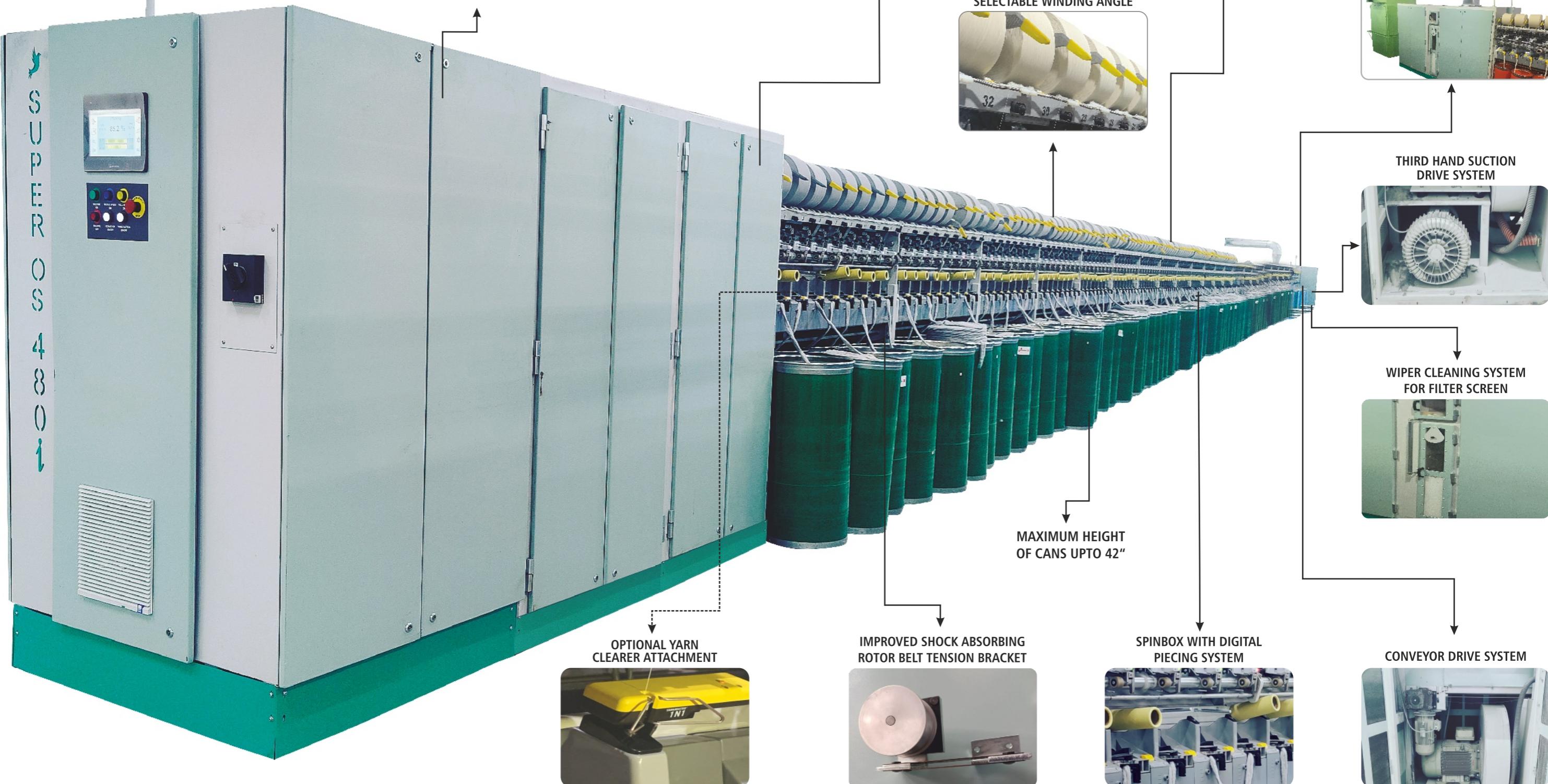


- ★ Technically designed to operate upto 1,00,000 Rotor RPM
- ★ Count range from 2.5's Ne to 40's Ne
- ★ Individual feed Drive Intake System
- ★ Joint piecing enabled through Electronic Control System
- ★ Yarn Clearer is available as an optimal attachment

EASILY ACCESSIBLE ELECTRICAL PANEL SYSTEM



SUPER OS 480i





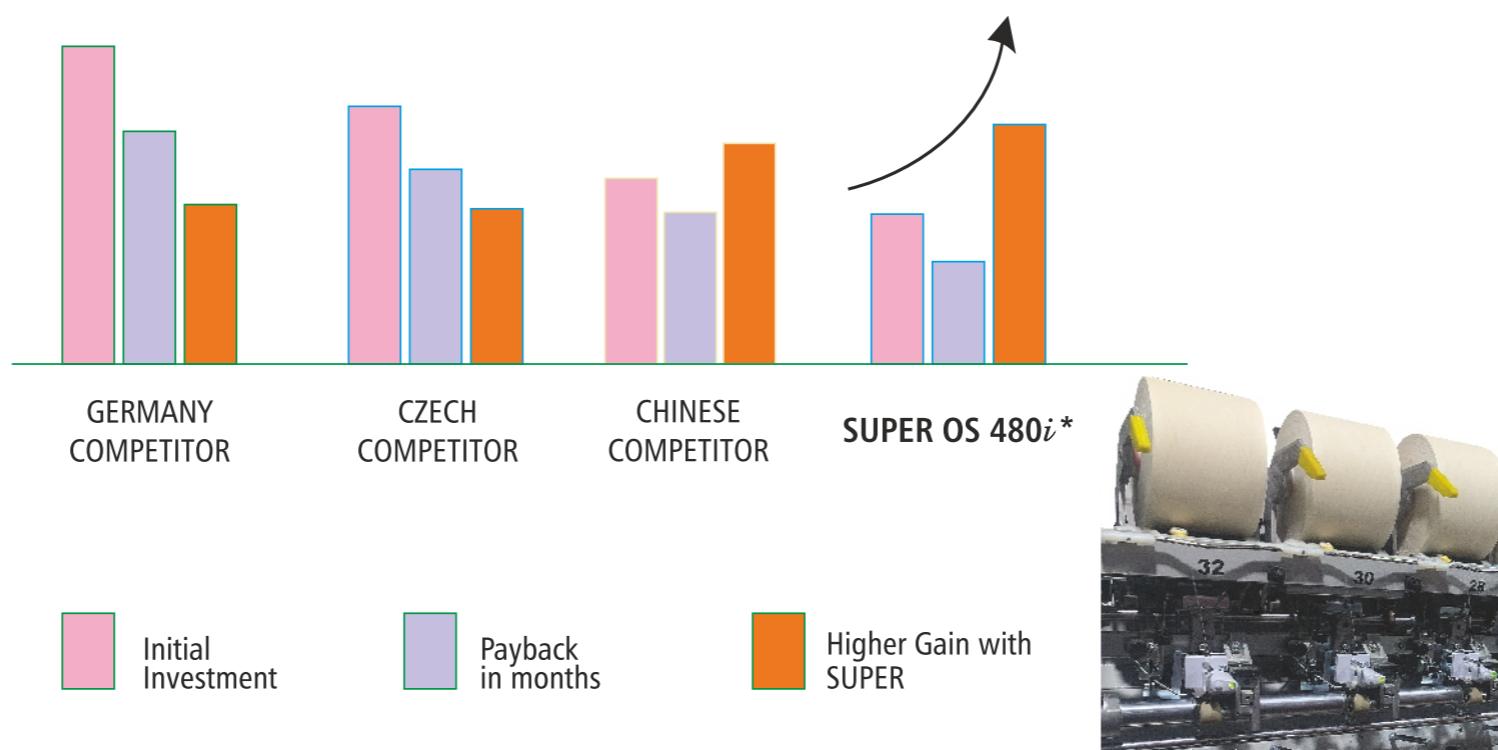
SUPER OS 480i - PRODUCTION CALCULATION / ROTOR @ 100% EFFICIENCY

	Rotor Speed	50,000	60,000	70,000	80,000	90,000	1,00,000
Yarn Count	Tm (or) Twist Factor	Yarn Weight - (Grams/Hour)					
10	4.5	316.96	380.35	443.74	507.13	570.52	633.92
	5.5	259.33	311.20	363.06	414.93	466.79	518.66
	6.5	219.43	263.32	307.21	351.09	394.98	438.87
20	4.5	112.06	134.47	156.88	179.29	201.70	224.11
	5.5	91.68	110.02	128.35	146.69	165.03	183.36
	6.5	77.58	93.09	108.61	124.12	139.64	155.15
30	4.5	61.00	73.19	85.39	97.59	109.79	121.99
	5.5	49.91	59.89	69.87	79.85	89.83	99.81
	6.5	42.23	50.67	59.12	67.56	76.01	84.46
40	4.5	39.61	47.54	55.46	63.38	71.30	79.23
	5.5	32.41	38.89	45.38	51.86	58.34	64.82
	6.5	27.42	32.91	38.39	43.88	49.36	54.85

Ready Reference Formula:

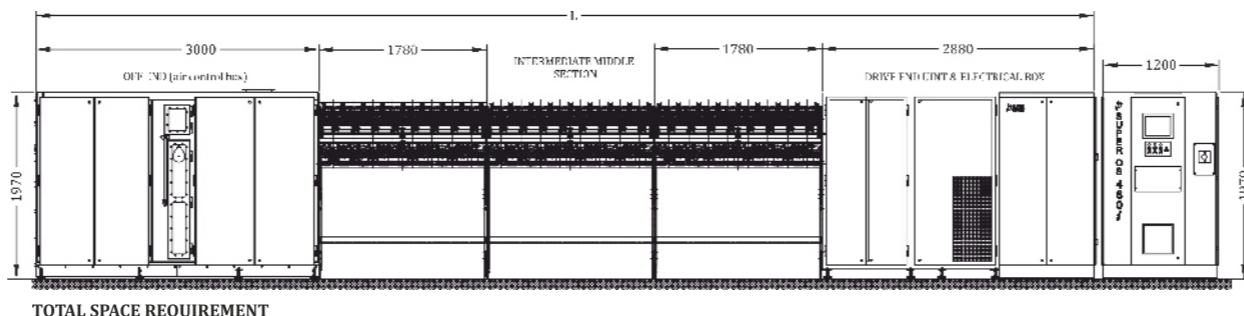
$$\text{Yarn Weight (Per Rotor @ } = \frac{\text{Rotor Speed} \times 0.902}{\text{100 % Efficiency}} \sqrt{\text{Count} \times \text{Tm} \times \text{Count}} \text{ (Grams/Hour)}$$

QUICKER PAYBACK WITH SUPER OS 480i



SUPER OS 480i FLOOR PLAN

OS 480i MACHINE LAYOUT



TOTAL SPACE REQUIREMENT

S.NO	N-NO OF SECTION	NO OF ROTORS	L (in meters)	L (in feet)
1	15	240	32.58	106.89
2	20	320	41.48	136
3	25	400	50.38	165.28
4	30	480	59.28	194.48



N - Number Of Intermediate Middle section

L - $5880 + (1780 \times N)$ mm

Technical Data

- ★ Yarn Count Range
 - a. 250 Tex - 15Tex
 - b. 2.5 Ne to 40s Ne
 - (Depending upon Raw Material)
- ★ Sliver Feed 7.0 K Tex - 2.5 K Tex
 - 0.08 Ne - 0.20 Ne
- ★ Fibre length upto 45 mm
- ★ Draft Range from 40 - 300
- ★ Maximum Rotor RPM upto 1,00,000.00
- ★ Rotor Diameter size from 32 to 66mm
- ★ Feed sliver Entry speed upto 12 m / Min
- ★ Fixing arrangement of Opening Roller & Rotor
 - Direct Mounting Type
- ★ Yarn Winding Take up speed
 - a. Cheese Winding upto 180 M / Min
- ★ Yarn Traverse Length - 150mm
- ★ Waxing Device - (Optional), But Motor Drive is centralised
- ★ Winding Angle - 30° - 40° adjustable through the touch screen.
- ★ Winding package size
 - a. Cheese Head Upto 4.0 kg and 300mm diameter
- ★ Winding Tube Size
 - a. Diameter - 40, 44 ,50, 54.
 - b. Length - 170mm

Salient Features

- ★ Maximum No. of Rotors - 480 Rotors (16 Rotors / Section)
- ★ Maximum No. of sections up to 30
- ★ Spindle Gauge - 210mm
- ★ Piecing parameters, Rotor Speed, Technological Air pressure setting, Take up speed, Winding parameters are all controlled by Touch Screen HMI
- ★ Central conveyor belt provided for removing packages
- ★ Special Coating and Nickel Plating and Chemical Treatment are available as option for Opening Rollers and Rotors
- ★ Ceramic inserts with smooth spiral and notched navels are available for special application.
- ★ Length measurement is incorporated for producing Yarn Packages with Specific Yarn Lengths
- ★ Yarn waste and Trash fibres are collected separately in separate chambers
- ★ Technology Air Suction chamber waste is Automatically cleared by separate wiper.
- ★ Yarn Traverse Guide - Through Servo "E" Cam Motion , infinitely variable offset upto 4mm
- ★ Electrical Joint Spinning system is provided for controlling Yarn breakages during a Power failure. (The Joint Spring system availability will be based on the Total No.of Rotors)
- ★ Two Colour LED light sensors for easier operator assistance.
- ★ Feed cans which can be accommodated. Dia : upto 16", Height : Maximum 42"



SUPER
≡ Your Trusted Partner ≡

Our Logo epitomizes our working culture

- * The white Dove represents peace and harmony in the industry
- * The green background represents a clean and healthy environment



Super Machine Works Private Limited.,

100, Athipalayam Road, Chinnavedampatti
Coimbatore - 641 049. Tamil Nadu, India

Phone : +91 422 2666786, 4274332
Mobile : +91 99429 09628, 99429 09627

E-mail : info@supergroupscbe.com, supergroupscbe@gmail.com
Spares : spares@supergroupscbe.com

Website : www.supergroupscbe.com

