



# **VANGUARD SUPREME**

## **Circular Knitting Machines**



# QUALITY



In its 90<sup>th</sup> year of continuous operation, Vanguard Supreme is the leader in circular knitting technology. Custom designed machines unsurpassed in quality. Proven to be productive and profitable for the production of underwear, T shirts, fleece wear, sportswear, casual wear, industrial fabrics, medical fabrics, and packaging fabrics.

From its founding in 1918 as the Supreme Knitting Machine Company, to its acquisition by the Singer Company in 1961, its return to private ownership in 1978 as Vanguard Supreme and in 1986 as part of Monarch Knitting Machinery Corporation, one objective has never changed, that is the **Commitment to Excellence**.

The long history of Vanguard Supreme is testimony to a continuity of commitment to **Total Customer Satisfaction**. It also is a testimony to its **Employees**, whose determination and work ethics have made the name **Vanguard Supreme** synonymous with **Excellence** in manufacturing and **Service** to our customers.

The construction of Vanguard Supreme knitting machines embody the most **Advanced Features and Engineering Techniques** obtainable in modern knitting equipment. Today, Vanguard Supreme knitting machines are in use the world over. Innumerable types of circular knit fabrics have been produced profitably on Vanguard Supreme machines. We are proud of the **Performance Record** our machines have compiled in knitting mills throughout the world and are **Pledged to Maintain this High Standard**.

## VANGUARD SUPREME

# HIGH SPEED



SI4A/DI2 Jumbo Machine



SI4A/H Knitting Elements with 4 tracks of cams.  
SFT4/H Knitting Elements



## High Speed Single Knit Machines

The high speed, high production jersey and fleece machines are ideal for producing the finest quality single knit fabrics. The computer designed closed cam track system ensures positive needle control and provides superb stitch definition. The jersey machine is equipped with angular sinker technology to improve fabric quality and lower the defect rate, while yielding a 30 percent increase in production over previous models. The fleece machine is equipped with a 3 level sinker (U.S. Patent 5,477,707 S Foreign Patents Pending) for improved knitting.

### Jersey Fabric Scope

- S Plain single jersey fabrics ideal for sportswear, leisure wear, underwear, and T shirts
- S Feeder stripes, plaited fabrics, 2-yarn fleece, satin stitch, lacoste, crepe, and twills

### Fleece Fabric Scope

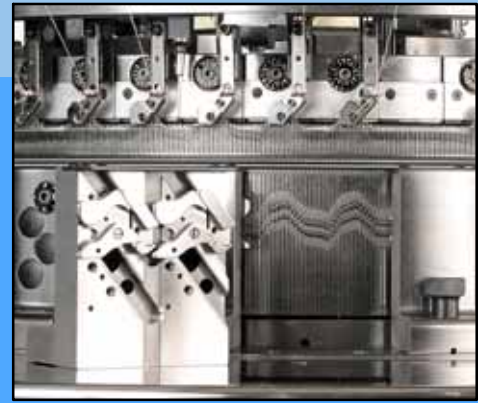
- S 3-yarn tie in fleece ideal for sportswear and leisure wear
- S 1 x 1, 2 x 1, and 3 x 1 needle selection
- S Diagonal, crossover, random patterns or french terry

### Machine Specifications

- Diameter . . . . . 11" to 32"
- Cut . . . . . Jersey and 2 End Fleece: 16 to 28 npi  
3 End Fleece: 12 to 22 npi
- Feeds . . . . . Jersey and 2 End Fleece: 4 per inch  
3 End Fleece: 3.5 per inch
- Speed Factor . . . . . Jersey: Up to 1750 depending on yarn quality and fabric type (single track only)  
2 End Fleece: Up to 1500 depending on yarn quality and fabric type.  
3 End Fleece: Up to 1000 depending on yarn quality and fabric type
- Cam Track . . . . . 4 available

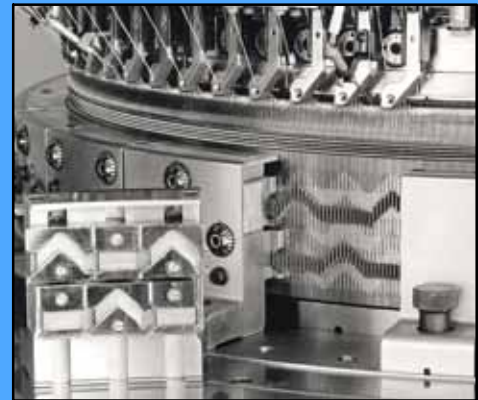


2SR2/Hi2 Jumbo Machine



2SR2/V Knitting Elements with 1 track of cams.

2SI3/V Knitting Elements



## High Speed Double Knit Machines

The high speed, high production rib and interlock machines are ideal for producing the finest quality fabrics. The computer designed closed cam track system ensures positive needle control and superb stitch definition. The rib is equipped with a 2 piece, fully tracked cylinder cam (U.S. Patent 5,182,927 S Foreign Patents Pending) allowing for adjustment of the stitch draw without losing the yarn feeding position of the needle. This unique cam design offers the close tolerances of a monoblock cam, while allowing for separate stitch adjustment. The rib machine is easily converted to produce interlock and eightlock fabrics.

### Rib Fabric Scope

- S 1 x 1, 2 x 1 and 2 x 2 rib fabrics ideal for underwear, collars, cuffs, and trim
- S Morgan thermal and raschel thermal (2 track)
- S Elastomeric plaited fabrics

### Interlock Fabric Scope

- S Interlock fabric ideal for ladies wear and men's wear
- S Feeder stripes, printed fabrics, and leisure wear

### Machine Specifications

- Diameter . . . . . 15" to 30" (rib also available in 11" to 14")
- Cut . . . . . Rib: 10 to 18 npi  
Interlock: 18 to 28 npi
- Feeds . . . . . Rib: 2 per inch  
Interlock: 3 per inch
- Speed Factor . . . . . Rib: Up to 1250 depending on yarn quality and fabric type  
Interlock: Up to 1200 depending on yarn quality and fabric type
- Cam Track . . . . . 2 available (1 track on 11" to 14")

# SPECIALTY PRODUCTS



4SI4/SI Single Knit Machine



The high production, small diameter jersey and rib machines are ideal for producing the finest quality fabrics used in the apparel, industrial, medical, and packaging industries.

## Jersey Fabric Scope

- S Plain single jersey fabrics
- S Pique, satin stitch, lacoste, crepe, twills, 2 yarn fleece, plaited fabrics, and small jacquard

## Rib Fabric Scope

- S 1 x 1, 2 x 1, and 2 x 2 rib fabrics
- S Elastomeric plaited fabrics

## Machine Specifications

- Diameter . . . . . Jersey: 4" to 10"  
Rib: 5" to 10"
- Cut . . . . . Jersey: 16 to 28 npi  
Rib: 4 to 12 npi
- Feeds . . . . . Jersey: 4 per inch  
Rib: 1.5 per inch  
(5" and 6") or 2 per inch  
(7" to 10")
- Speed Factor . . . Up to 1000 depending  
on yarn quality and  
fabric type
- Cam Track . . . . . Jersey: 4 available  
Rib: 1 available

## Small Diameter High Speed Machines



1SR1.5/SI Double Knit Machine



# STATE OF THE ART

## Standard Machine Features

- S Host System Computer\*
- S AC motor
- S AC inverter variable speed drive
- S MPF yarn feeding system
- S Automatic oiling of knitting elements
- S 3 roller, positive drive takeup

\* Available on Delta and V Frame machines only. SI and SI2 frame machines use an information display computer at this time.

## Optional Machine Features

- S Motorized MPF yarn feeding system (not available on small diameter machines)
- S 3 roller, positive center roll takeup (not available on jumbo frame)
- S Top fan system
- S Uniwave flutter blower
- S Industrial frame with 35 inch roll capacity (not available on 4" to 10" machines)
- S Jumbo frame with 45 inch roll capacity (not available on 4" to 10" machines)
- S Filter Flow 2000 lint cleaning system (U.S. Patent 5,737,942 S Foreign Patents Pending)
- S Lycra Kit
- S Yarn ravel measuring system
- S Fabric defect scanner

## Host System Computer

The Host System Computer electronically controls all functions of the machine. It provides the operator with machine setup data, machine fault data, and machine production data. It is programmable and can be set up to meet the specific needs of each customer.

### Features:

- S Wired or Wireless Ethernet\*  
Data Acquisition
- S Process and Efficiency Tracking  
(Downtime, Piece, Knitter, Shift,  
Mechanical, and Fabric Scanner)
- S Preventive Maintenance Tracking
- S Programmable Automatic Oil  
Flush and Air Blow Down
- S Predetermining Counter (Doff)
- S 4-Shift Totalizing Counter
- S Inspection Counter (Predoff)
- S Stop Motion Override Delay  
(Bottom Stop Motions, Adjustable)
- S RPM and Speed Factor
- S High and Low Speeds
- S Machine Fault Indication
- S Press Off Assist
- S Fabric and UPC Scanner Interface
- S Multiple Language Selection



\* Wireless Ethernet is an optional feature.



## Filter Flow 2000

(U.S. Patent Number 5,737,942 S Foreign Patents Pending)

An air flow system that markedly improves machine operating and maintenance cost by preventing accumulation of lint and debris in the needles and sinker sections. It **lowers machine temperatures and improves needle life**. When using open end yarns, the improvement can be dramatic. The Filter Flow 2000 ends the need to flush the machine, preventing oil spots, oil lines and graphite lines, **eliminating all associated fabric waste**.

### Features

- S 3/4 horse power motor
- S Temperature monitor with over temperature stopmotion
- S Filter cleaning monitor with dirty filter stopmotion
- S Replaceable 16 inch x 16 inch x 2 inch filter
- S Removable air chamber covers for easy access to cylinder knitting elements
- S Digital status/stopmotion readout using machine's host system computer
- S Integrated design fits seamlessly on machine

Additional designs available for Monarch and all other brands of Knitting Machines.



**Central to our way of Thinking**

**We are the Manufacturer.**

We know knitting like no other company. We build the highest quality, most productive knitting machines. We continually upgrade camming and other critical components for improved performance. We will design machinery according to specific customer requests. We originate designs, we do not take other manufacturer's knitting elements or knitting heads and attempt to make copies. We have a large technical staff, on call. If something goes wrong, we take responsibility and fix it. We earn your trust, not with stories or promises, but with technology and back up. We sell used machines and have the knowledge to recondition them properly. We manufacture cylinders and dials, supply needles and sinkers, and manufacture spare parts. We sell the most reliable collar machine. We are the exclusive producer of the Filter Flow.

**We want to be your Supplier.**

All information in this brochure is given in good faith but without warranty.

Visit our website at [www.vanguardsupreme.com](http://www.vanguardsupreme.com)



A DIVISION OF MONARCH KNITTING MACHINERY CORP.

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