

First Screen (Input Data)

V-Belts Design (Main)
CAD of V-Belts

Help About Exit

**Input Data**

Transmitted Power (H) kW

Input RPM (n1)

Output RPM (n2)

Application Type  Service Factor

Max. Center Distance (C) mm

**Selection of Belt Type**

Belt Type

**Output Data**

Design Power (Hd) kW

**Selection of Diameters (d, D) mm**

Small Sheave Diam. (d) mm  
 Calculated  Standard

Large Sheave Diam. (D) mm  
 Calculated  Standard

Actual Output RPM (n2)

Center Distance Range  < C <

Angle of Contact (Degree)

Belt Length (L) mm

Nearest Standard Belt Length (Ls) mm

Inside Length (Li) mm

Small Diameter Factor, Ke

Power Rating (Hrat) kW

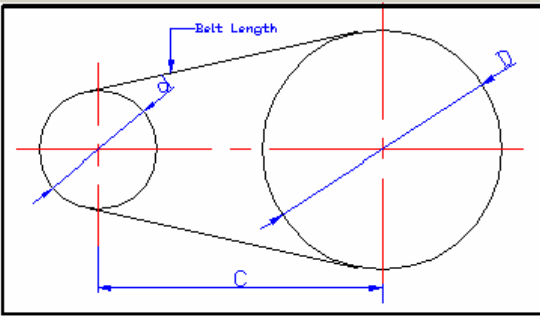
Length Correction Factor, KL

Arc of Contact Angle Correction Factor, KA

Number of Belts, N

Corrected Center Distance, C' (mm)

Final Dimensions of Standard V-Groove Pulley



**Open Type V-Belt**

Selection of Service Factor (Input Data)

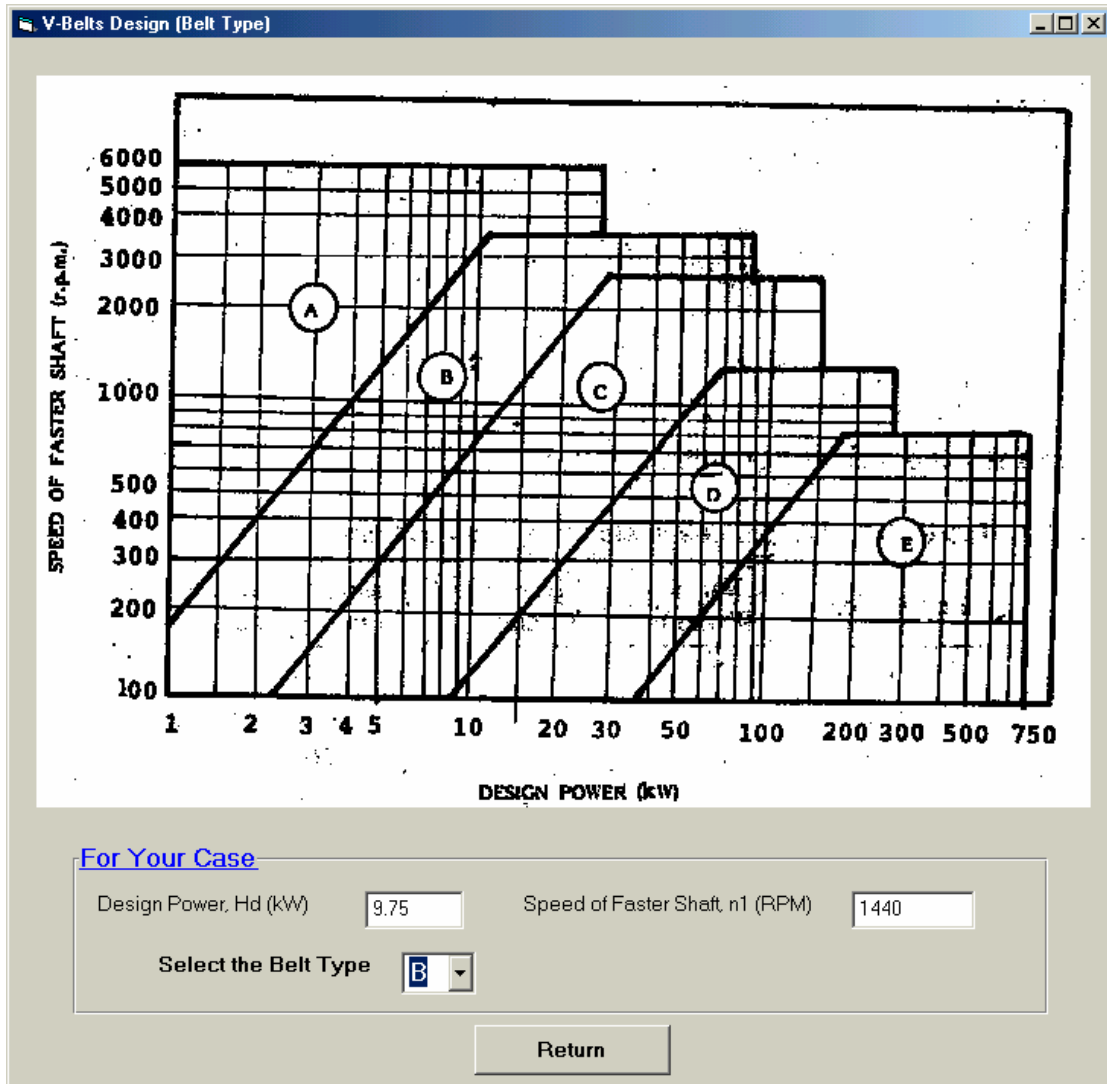
V-Belts Design (Application Type) X

Suggested Service Factor

<i>Hours in daily service</i>	Normal Torque			Hight Torque		
	3-5	8-10	16-24	3-5	8-10	16-24
Agitators for liquids Blowers and exhausters Centrifugal pumps and compressors Fans up to 10 hp Light-duty conveyors	1.0	1.1	1.2	1.1	1.2	1.3
Belt conveyors for sand, grain, etc. Dough mixers Fans over 10 hp Generators Line shafts Laundry machinery Machine tools Punches, presses, shears Printing machinery Positive displacement rotary pumps Revolving and vibrating screens	1.1	1.2	1.3	1.2	1.3	1.4
Brick machinery Bucket elevators Exciters Piston compressors Conveyors (drag, pan, screw) Hammermills Papermill beaters Piston pumps Positive displacement blowers Pulverizers Sawmill and woodworking machinery Textile machinery	1.2	1.3	1.4	1.4	1.5	1.6
Crushers (gyratory, jaw, roll) Mills (ball, rod, tube) Hoists Rubber calenders, extruders, mills	1.3	1.4	1.5	1.5	1.6	1.8

Type the Selected Value of S.F.  Return

Selection of Belt Type



Selection of Sheave Diameters

The screenshot shows a software window titled "Selection of Standard Pulley Diameters" with the following fields and values:

Small Sheave Diameter (d) mm		Large Sheave Diameter (D) mm	
Calculated	265.26	Calculated	600.00
Standard	280	Standard	630
Selected from Standard	200	Selected from Standard	600

Change in Output RPM (n2)	
Desired Output RPM (n2)	480
Actual Output RPM (n2)	480.00
Actual Belt Velocity (v) m/s	15.08

Return

Output Results

**V-Belts Design (Main)** Help About Exit

**CAD of V-Belts**

**Input Data**

Transmitted Power (H) kW:

Input RPM (n1):

Output RPM (n2):

Application Type:  Service Factor:

Max. Center Distance (C) mm:

**Selection of Belt Type**

Belt Type:

**Output Data**

Design Power (Hd) kW:

**Selection of Diameters (d, D) mm**

Small Sheave Diam. (d) mm  
Calculated:  Standard:

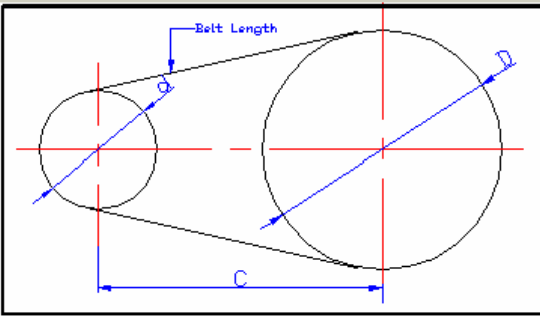
Large Sheave Diam. (D) mm  
Calculated:  Standard:

Actual Output RPM (n2):

Center Distance Range:  < C <

Angle of Contact (Degree):

Belt Length (L) mm:



**Open Type V-Belt**

Nearest Standard Belt Length (Ls) mm:

Inside Length (Li) mm:

Small Diameter Factor, Ke:

Power Rating (Hrat) kW:

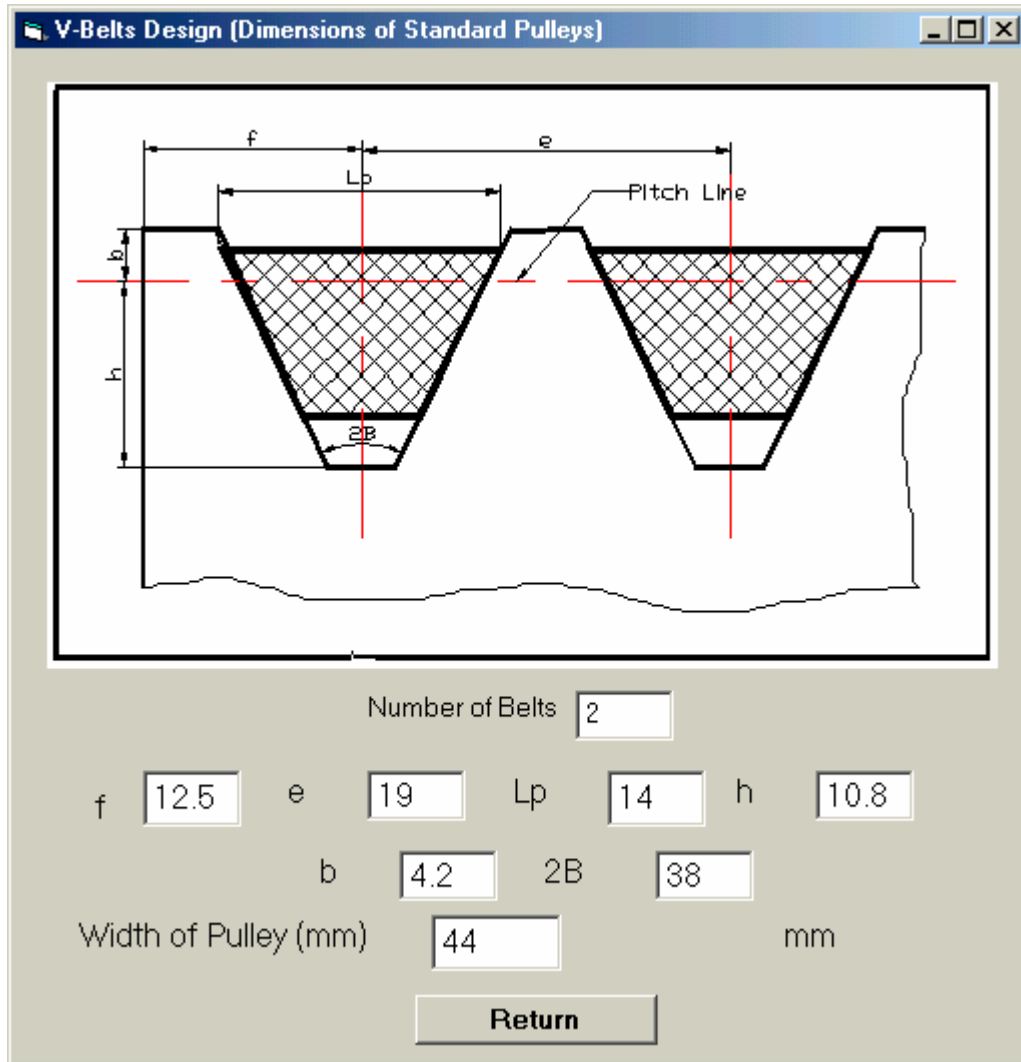
Length Correction Factor, KL:

Arc of Contact Angle Correction Factor, KA:

Number of Belts, N:

Corrected Center Distance, C' (mm):

Output Results (Dimensions of Standard Sheaves)



**Flowchart for V-Belt Design**

