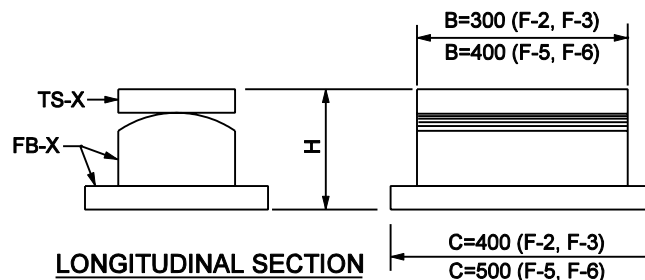
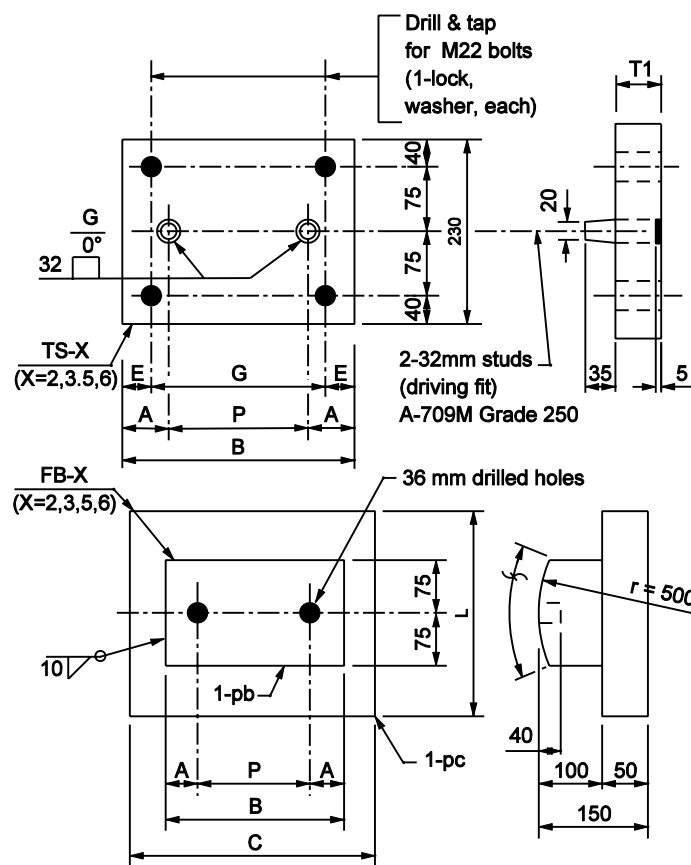


**FIXED SHOE ASSEMBLY**



**LONGITUDINAL SECTION**

Shoe Type	Maximum Reaction	Shoe Assembly		H
		TS-X	FB-X	
F-2	1787 kN	TS-2	FB-2	200
F-3	1090 kN	TS-3	FB-3	
F-5	1000 kN	TS-5	FB-5	
F-6	1375 kN	TS-6	FB-6	

**NOTES :**

- Curved surfaces of shoes to be machined after weldments have been completed. At the contractor's option the following substitutions of materials will be allowed at no increase in unit price of material:
  - A-709M Grade 345W steel may be used in lieu of A-709M Grade 250 steel.
  - A-709M Grade 690 steel may be used in lieu of A-709M Grade 345W or A-709M Grade 250 steels.
- Section "pb" to be finished from 100 mm thickness while Section "pc" is to be straightened.
- Maximum horizontal thrust per Fixed Shoe = 22kN.

TS-X	T1	E	G	A	P	Section	Material
TS-1 *	45	55	190	55	190	ℙ 230 x 45	A-709 Grade 250
TS-2	50	55	190	65	180	ℙ 230 x 50	A-709 Grade 345W
TS-3	50	55	190	70	160	ℙ 230 x 50	A-709 Grade 690
TS-4 *	45	75	250	75	250	ℙ 230 x 45	A-709 Grade 250
TS-5	50	75	250	85	240	ℙ 230 x 50	A-709 Grade 345W
TS-6	50	75	250	95	220	ℙ 230 x 50	A-709 Grade 690

\* Top shoe used with Expansion Steel Shoe only.

**TOP SHOE**

FB-X	C	L	B	A	P	Sections	
						pb	pc
FB-2	400	300	300	60	180	ℙ 150 x 100	ℙ 300 x 50
FB-3	400	400	300	70	160	ℙ 150 x 100	ℙ 400 x 50
FB-5	500	300	400	80	240	ℙ 150 x 100	ℙ 300 x 50
FB-6	500	400	400	90	220	ℙ 150 x 100	ℙ 400 x 50

**FIXED BASE**

All Dimension are in mm unless otherwise specified

INDIANA DEPARTMENT OF TRANSPORTATION

**FIXED STEEL SHOE DETAILS**

MARCH 2003

STANDARD DRAWING NO. 711-BSTS-01

	/s/ Richard L. VanCleave	3-03-03
	DESIGN STANDARDS ENGINEER	DATE
	/s/ Richard Smutzer	3-03-03
	CHIEF HIGHWAY ENGINEER	DATE

DESIGN STANDARDS ENGINEER