## Table 5: Overview of HMT-MTL's international collaborations\*

Year	Collaborator		Country	Product
Turning				
1949-66	Oerlikon		Switzerland	High Precision Centre Lathes
1959-66	ErnaultBatignolles		France	Production Centre Lathes (LB)
1964-74	Haut Rhin		France	Single Spindle Automatics
1966-74	Gildemeister	1	FRG	Multispindle Bar & Chucking Automatics
1966-74	Haut Rhin		France	Single Spindle Automatics
1966-77	Ernault Somua		France	Copying Lathes (S. Pilote)
1966-71	Jones & Lamson		USA	FAY Automatic Lathes
	DivisionWaterburyFarrel			
1966-71	Gildemeister		FRG	Drum Type Turret Lathes
1969-74	Oerlikon		Switzerland	Multipurpose Lathes (DA)
1970-75	American Tool Works		USA	Heavy Duty Engine Lathes & Machining Centres for Drilling Milling & Boring Operations
1971-78	Petermann		Switzerland	Sliding Headstock Automatics
1984-92	Gildemeister		FRG	Multispindle Automatics (GF, GS)
1986-91	Gildemeister		FRG	GDM Series Chuckers
Machining Centers & Milling Machines				
1957-63	Fritz Werner	1	FRG	Milling Machines (M2 & M3)
1963-70	Fritz Werner	<u> </u>	FRG	Milling Machines (Electrically Controlled)
1966-77	Ernault Somua		France	Copying Lathes (S. Pilote)
1970-77	Fritz Werner	1	FRG	Ram Bed Type Milling Machines
1970-75	American Tool Works		USA	Heavy Duty Engine Lathes & Machining Centres for Drilling Milling & Boring Operations
1971-78		-		
	Fritz Werner		FRG	Unit Assembled Bed Type Milling Machines
1983-91	KTM		UK	CNC Machining Centres
Grinding				
1959-66	Olivette		Italy	Cylindrical Grinding Machines
1961-71	Limex		GDR	Hydraulic Surface Grinding Machines (SFW)
1985-93	Buderus		FRG	Precision Internal Grinding Machines
Gear Cutting				
1963-70	Drummond Brothers		UK	Gear Shapers (Maricut 2A & 3A)
1964-71	Liebherr		FRG	Gear Hobbing Machines(L series)
1976-79	Cross		USA	Gear Chamfering Machines
1983-91	Liebherr	1	FRG	Heavy Duty Gear Hobbers
1983-91	Liebherr		FRG	High Speed Gear Shapers (WS1)
			rku	nigii speed deal Stiapers (WSI)
Metal Forming  1969-79   Interfonda   Switzerland   Diecasting Plastic Injection Moulding Machines				
1969-79			USA	
	Verson			Presses & Press Brakes - Hydraulic & Mechanical
1982	Interfonda		Switzerland	Diecasting Dies
1981-89	Reifenhauser		FRG	Plastic Extrusion Machines
1982-89	Verson		UK	Presses
1996-98	Clearing-Niagara		USA	Presses
Special Purpose Machines				
1961-68	Renault		France	Special Purpose Machines
1970-77	Fritz Werner		FRG	Ram Bed Type Milling Machines
1971-78	Fritz Werner		FRG	Unit Assembled Bed Type Milling Machines
1976-79	Cross		USA	SPMs
1980-87	Pegard		Belgium	Horizontal Boring Machine
General Purpose Machines & Others				
1958-65	Hermann Kolb	_	FRG	Radial Drilling Machines (RM)
1967-77	Oswald Forst		FRG	Broaching Machines - Horizontal & Vertical (Internal & External)
1968-73	Fin Motil	II———	Switzerland	Clamping Chucks
1969-76	Ateliers GSP	-	France	Drilling & Boring Machines
1982-90	Oswald Forst	7	FRG	Surface Broaching Machines
1984-90	Carl Zeiss Jena	_	GDR	Ballscrews
1984-94	Siemens		FRG	CNC Control Systems

 $<sup>^{*}</sup>$  German flag denotes collaborations with East German ("GDR") and West German ("FRG") companies