POS.	QTY	PART #	DESCRIPTION
1	1	100057654	**SUSS MA/BA6 MASK AND BOND ALIGNER** **Remanufactured** basic system prepared for manual alignment stage with: + automatic wedge compensation system in contact or without contact between mask and wafer (with reference balls), alignment gap programmable from 1 to 1000 micron, resolution 1 micron + movement range mask aligner mode X +/-10.0mm, Y +/-5.0mm, Theta +/-5° + movement range bond aligner mode X +/-3.0mm, Y +/-3.0mm, Theta +/-3° + Safety labelling in English basic equipment consisting of: + machine base with mechanical, pneumatic and electrical equipment 230V/50/60Hz + adapter system for mask holders for use in combination with mask holders for masks up to 7" x 7" max. + TSA microscope stage with motorized X-Y-manipulator and manual rotation for microscope + with integrated microscope tilt for exposure and to create access for mask loading + prepared for movable exposure unit (necessary for BA function) + manual loading and unloading of wafers or substrates + microprocessor control with LCD display + for wafers 2" up to 150 mm dia. or substrates 2" x 2" up to 6" x 6" for lithography applications + for wafers 3" up to 150 mm dia. for bond applications + operator manual on CD + prepared for BSA microscopes with working distance 33mm + among other things to be ordered separately: + manual alignment stage system dependent on necessary BSA microscope objective separation + TSA and/or BSA microscopes + exposure unit, lamp and optics

			+ mask holders and chucks + bond adapter frame + transport fixture and bond align chucks + other accessories are available
2	1	G204712	**ALIGNMENT STAGE MA/BA6-8/WD-33/MAN** + X-Y-THETA alignment stage with high precision micrometer screws for manual alignment + WEC Head for BSA microscope objective separation in X direction from 15mm to 100mm + motorized Z axis
3	1	G190435	**BOTTOM SIDE ALIGNMENT SYSTEM MA6/BA6/BA8 AA=33 FOR EISS** + two special video microscopes with selectable magnification 128X/410X (refers to 17" monitor) + motorized stages + separation in X: 15mm ...100mm + travel in Y: - 20mm to + 50mm + motorized focus 6mm + two 1/2" CCD video cameras
4	1	G182171	**ENHANCED IMAGE STORAGE SYSTEM (EISS) FOR MA8/BA6** image storage and fine focus controller for simultaneous focussed images of mask and wafer for easy and precise alignment with large object magnification or large alignment gaps + PC with image and fine focus control + for M306/8, DVM6/8 and BSA + 17" TFT flat screen + integrated trackball + S-VGA resolution 1280x1024 + contrast integration function for pure contrast images + electronic brightness, contrast and magnification adjustment + adjustment of brightness ratio stored/live image
5	1	G160148	**VIDEO IMAGING SYSTEM FOR MICROSCOPES M500/M306** + B/W camera 1/2", TFT flat screen 17" + camera adapter (magnification 1X)
6	1	G169732	**SUSS M306 SPLITFIELD MICROSCOPE CPL. FOR MA6/BA6** Ergonomic microscope for precise top side alignment of wafers, substrates, chips and pieces

			+ Base module, trinotube, 2 eyepieces 10X + Manual fine focus drive 600 micron + Incident illumination, fibre optics + Microscope adapter, rotation, focus drive + Objective separation in X from 27mm to 160mm
7	1	G111838	**MICROSCOPE ILLUMINATION 85W/M500/M306/MA6/BA6/LH350** + With yellow filter + Halogen-illumination 13.8V/85W to be attached to MA6/BA6 with LH350
8	2	G145984	**SINGLE OBJECTIVE UMPL FL 5X/0.15** + Working distance 20mm + Halogen-illumination 13.8V/85W to be attached to MA6/BA6 with LH350
9	1	G106970	**EXPOSURE UNIT MA6/BA6/350W** + Optics housing and mirror housing with ellipsoidal mirror and surface mirror + For wafer/substrate sizes up to 150mm diameter / 6 " x 6 " + For exposure lamps up to 500W + Prepared for use in combination with exposure optics optimized for high uniformity and high intensity for various wavelengths and applications + Range of wavelengths: 250nm to 400nm + With components for optimized diffraction reduction for high resolution proximity or contact printing + For large gap exposure or thick resists
10	1	G111071	**LAMP ADAPTER LH350/HBO350W/S**
11	1	G170957	**LAMP POWER SUPPLY UNIT CIC1200 FOR LH350** + Constant light intensity mode + Constant power mode + For the DC lamps 200W, 350W/S, 500W, XE 500W + Operation of additional lamp with a current of up to 35A possible (has to be specified and agreed upon) + Easy operation due to microprocessor control + Simultaneous digital display of light intensity and lamp power + Integrated connector for UV-probe for easy calibration + Dual channel mode for 2-channel light-sensors with various wave-lengths + Interlock for machine and lamp protection + For input voltages of 230V +/- 10%, 50/60Hz + Power consumption: maximum 2300 VA + Single pulse ignition ensures gentle operation, provides easy lamp start and increases lamp durability
12	1	G113519	**3 LAMP SET HG 350W/S LH 350 / OSRAM** + Including wires
13	1	100005315	**OPTICS UV400/HR/W-150/LH350**

			consisting of: + cold light mirror no. 1, 110x115mm + fly's eye, Herasil + condensor lens, Herasil, dia. 55mm + two lens plates, Herasil, conf. A + front lens, transparent, dia. 180mm
14	1	G147901	**SUSS 2-CHANNEL LIGHT-SENSOR 365/405NM** + For lamp power control + Installed inside mirror house
15	1	G180336	**I-LINE FILTER/DIA 75MM/ROD** + Band-pass filter + Transmission around 365nm + Diameter 75mm
16	1	G206200	**VACUUM PUMP (DOUBLE MEMBRANE) 220V/50HZ CPL** + pump to assist insufficient vacuum supply from facilities
17	1	G170010	**SUSS MA6/BA6 VIBRATION ISOLATION AND DAMPING SYSTEM** + Antivibration machine base frame / black + Dimension: 930mm x 950mm x 705mm + One shelf 280mm x 700mm, height adjustable + Three covers right, left and backside + Four wheels + Handrest for ergonomic operation of the machine + Pneumatic vibration isolation and automatic height control + Vertical frequency of resonance: < 2Hz at rated load + Horizontal frequency of resonance: < 1,8Hz at rated load + Improved horizontal damping + Max. load: 590kg + Vertical adjustment stands + Suitable for cleanroom class 100
			TOOLING W-4
18	1	G164104	**CHUCK MA6/BA6/CONT/BSA/W-100/TEF** + For wafer 100mm diameter + For proximity and soft contact exposures in combination with mask holder for proximity/contact processes + For soft contact exposures in combination with mask holder for contact processes + With 2 openings for viewing of alignment pattern X=32.5mm x Y=20mm + Center position of openings Xl/r=±30.25mm Y=0 (relativ to chuck center)
19	1	G107110	**MASK HOLDER MA6/BA6/BL/CONT/M-5-7/W-100**

+ Bottom loading
+ Contact wedge-error-compensation
+ For masks 5"x5" and 7"x7"
+ Exposure opening for wafers dia. 100mm
+ With displaceable stop pins
+ With displaceable additional mechanical clamping

TOOLING W-6

20 1 G188852 **CHUCK MA6/BA6/CONT/BSA/W-150/TEF**

+ For wafer 150mm diameter
+ For proximity and soft contact exposures in combination with mask holder for proximity/contact processes
+ For soft contact exposures in combination with mask holder for contact processes
+ With 2 openings for viewing of alignment pattern X=42mm x Y=20mm
+ Center position of openings Xl/r=±35mm Y=0 (relativ to chuck center)
+ With prealigner pins for flat length 57.5mm
+ With teflon coating

21 1 G107094 **MASK HOLDER MA6/BA6/BL/CONT/M-7/W-150**

+ Bottom loading
+ Contact wedge-error-compensation
+ For masks 7"x7"
+ Exposure opening for wafers dia. 150mm
+ With stop pins
+ With additional mechanical clamping