

Issue	Action / Result
Dirty installation	Check MFC: Disassemble and visual inspection (gives no 100% feedback if it is ok) Results no dirty elements visible
Dirty installation	Check MFC: change MFC with a new one
Dirty installation	Direct connection to the torch from the gas bottle with a MFC between
Dirty installation	Checking filter before Liburdi machine Additional filter before Sciaky machine was installed 04.07.11
Dirty installation	Checking pipe regarding to dirt before filter and before Sciaky (visual inspection) No evidence of unusual pipe condition

Leakages	Checking machines (Liburdi / Sciaky) with spray No leakages detected
Leakages	Checking pipeline from welding machine to heat treatment area with spray
Leakages	Checking pipeline from welding machine to heat treatment area – pressure test Test OK – report will be distributed separately
Leakages	Checking pipeline from heat treatment area to tank with spray Not necessary – pressure test done
Leakages	Checking pipeline from heat treatment area to tank – pressure test Test OK – report will be distributed separately
Gas quality	Checking quality heat treatment (still possible that quality on welding is not ok)
Gas quality	Checking with external bottle (maybe repetition necessary)
Gas quality	Compare results of both due point meters, inform external company Emitter
Gas quality	Checking gas quality with a special device

Stable gas pressure	Ask about digital Barometer which records the gas pressure over a period of time Not possible
Stable gas pressure	Install Manometer before Liburdi
Electrodes	Checking different electrodes from different producers Results are comparable
Torch	Checking leakages at torch on both machines No leakages
Torch	Torch cable resistance checking Checked on Liburdi results OK Sciaky OK as well
Power Supply	Checking external power supply quality with external device Results are OK
MFC defect	Exchange MFC for Liburdi and Sciaky
MFC defect	Order of a new MFC for Liburdi and Sciaky
Electro valves defect (Sciaky)	Possibility of valves check has to be found Way of checking is defined
Electro valves defect (Sciaky)	Checking valves Valves are OK
Gas Quality	Check if we find a gas better than 5.0 and buy a bottle of it New bottle from a different supplier with a higher quality was delivered → results are the same
General	Creating a checklist about what parts are already or can be replaced
Installation	Exchanging plasma gas pipes on Liburdi

Installation	Exchanging plasma gas pipes on Sciaky
Electricity	Check electricity on Sciaky Bypass was done without any changes of results
Electricity	Double check additional possibilities concerning electricity No other possibility available
Power Supply	Checking cable of Sciaky (if not okay, create by-pass) no deviation was found
Power Supply	Checking current on torch of Sciaky Results are OK
Power Supply	Checking stability of current and voltage and current leakages on Sciaky No deviation was found
Power Supply	Checking possibility of external power supply
General	Blogging problem description on Internet → Waiting for answers
General	Ordering Sciaky specialist from Germany
Cooling	Check cooling device - Water was changed → no changes - Water flow → OK → Cooler is working properly
MFC	New calibration of MFC (intern)
General	Discuss list of spare parts with Sciaky Specialist

	Check of distribution points for Argon on Sciaky
	Check of MFC by by-pass and direct connection of Argon to Torch
Internet	Check of generator on Liburdi regarding carbon build up
Gas quality	Start Discussion with Linde: Exchange whole Argon (tank, pipelines) if Linde can not prove the gas quality and cleanliness