| Print mode | Specifications | XpertJet 1641SR CMYK | | XpertJet 1682SR CMYKcmk | | XpertJet 1682SR 2xCMYK | |
|---|---|---|---|---|---|---|---|
| **SuperHigh Quality** | (12 Pass on CMYK - 24 Pass on CMYKcmk) 1080x1440 Vsd3 Fixed Small Dot - Bi-Dir / 460cps / **I-Weave** PQ 130 / WF3 / IP_,5 / DN2 / CV2 / **EF33** | **4,3** *m²/h* | Perfect printing (fine quality and bandingfree), even with difficult files on difficult media | **3,7** *m²/h* | Perfect printing (Extreme fine photo quality and bandingfree), even with extremely difficult files on difficult media | **7,5** *m²/h* | Perfect printing (fine quality and bandingfree), even with difficult files on difficult media |
| **High Quality** | (12 Pass on CMYK - 24 Pass on CMYKcmk) 1080x1440 Vsd3 Fixed Small Dot - Bi-Dir / 460cps / **Fine&Fog** PQ 130 / WF3 / IP_,5 / DN2 / CV2 / **EF18** | **4,4** *m²/h* | In case the firmware is 1.02 or higher, Use the above mode instead | **4,8** *m²/h* | Almost identical to the mode above. Slightly faster because of the weave, but the Fine&Fog can trigger a microstructure in the print in some very rare cases | **9,6** *m²/h* | Identical to the mode above, but Fine&Fog has a small risk on microstructures in the print |
| **Normal Quality Fine** | (8 Pass on CMYK - 16 Pass on CMYKcmk) **720x720** Vsd3 **Vardot** - Bi-Dir / 460cps / I-weave **PQ 180** / WF3 / **IP4,2** / DN2 / CV2 / EF33 | **6,5** *m²/h* | A good printmode for all standard printjobs. Good speed - quality ratio | **5,3** *m²/h* | A very good printmode (photoquality) for all standard printjobs | **11,5** *m²/h* | A good printmode for all standard printjobs |
| **Normal Quality Robust** | (8 Pass on CMYK - 16 Pass on CMYKcmk) **720x1440** Vsd3 **Fixed Middle Dot** - Bi-Dir / 460cps / I-weave **PQ 160** / WF3 / **IP2,4** / DN2 / CV2 / EF33 | **6,5** *m²/h* | See above. Slightly more grain, but less banding in difficult jobs | **5,3** *m²/h* | See above. No longer super photoquality but very suitable for diffficult image/media | **11,5** *m²/h* | See above. Slightly more grain, but less banding in difficult jobs |
| **Medium Quality Fine** | (6 Pass on CMYK - 12 Pass on CMYKcmk) 720x1080 Vsd3 **Vardot** - Bi-Dir / 460cps / I-weave PQ 170 / WF3 / **IP2,2** / DN2 / CV2 / EF33 | **8,5** *m²/h* | Good for banner printing. Higher production mode. Banding depending on the image / media | **7,6** *m²/h* | Default quality mode for a 7-color printer | **15,0** *m²/h* | Good for banner printing. Higher production mode. Banding depending on the image / media |
| **Medium Quality Robust** | (6 Pass on CMYK - 12 Pass on CMYKcmk) 720x1080 Vsd3 **Fixed Middle Dot** - Bi-Dir / 460cps / I-weave PQ 170 / WF3 / **IP2,4** / DN2 / CV2 / EF33 | **8,5** *m²/h* | See above. Slightly more grain, but less banding in difficult jobs | **7,6** *m²/h* | See above. Slightly more grain, but less banding in case of difficult job / media | **15,0** *m²/h* | See above. Slightly more grain, but less banding in case of difficult job / media |
| **Fast Mode** | (4 Pass on CMYK - 8 Pass on CMYKcmk) 720x720 Vsd3 Fixed Large Dot - Bi-Dir / 460cps / **I-weave** PQ 180 / WF3 / IP2,3 / DN2 / CV2 / **EF33** | **13,1** *m²/h* | Fast printing. Good for large billboards. Fixed dot is advised to counter banding | **11,5** *m²/h* | Faster production mode. Medium quality. Slightly grainy, but thanks to the light colors still very acceptable | **23,0** *m²/h* | Fast printing. Good for large billboards. Fixed dot is advised to counter banding |
| **Draft Mode** | (4 Pass on CMYK - 8 Pass on CMYKcmk) 720x720 Vsd3 Fixed Large Dot - Bi-Dir / 460cps / **Fog** PQ 180 / WF3 / IP2,3 / DN2 / CV2 / **EF16** | **18,1** *m²/h* | Draft output. No guarantees on quality | **17,0** *m²/h* | Draft output. No guarantees on quality | **33,1** *m²/h* | Draft output. No guarantees on quality |

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**IMPORTANT NOTES**

1. We strongly recommend to use only the **Vsd3 dot family** for Mutoh solvent inks. Vsd4 can differ a lot between machines and the small dot can cause ink mist. Vsd4 is only advisable in case customers can make their own profiles, and need extreme photo quality. Vsd4 users should limit the printmode to 320cps (slow carriage) and Uni-dir for such high-Quality results. Vsd4 is NOT advised for UMS inks. Vsd4 is NOT advised in combination with middle or high Headheight (too much risk on ink mist).

2. To adjust the Vsd3 (5,1 / 8,2 / 16,6 ng) dot family (in 460cps carriage speed) in user mode, you need to select **pattern E (Setup - User type - Type# - 2: Adjust Print - Custom)** in the custom adjustments (make sure to adjust both **Rough** and **Fine** setting). In case you need to print with middle head height, we recommend to print in 320cps carriage velocity (CV1 command instead of CV2) to avoid ink mist. (In that case, you should adjust pattern B, both rough and fine)

3. **Var dot or Fixed Dot**? Vardot printing will result in lesser grainy prints. It can however create banding when printing large solid color areas. In case you are troubled by banding, we recommend printing with fixed dot. Fixed dot also counters network lag issues.

4. We strongly recommend the **I-weave for all print modes** (best results to counter banding). On 1641SR available since firmware 1.02. It does not matter if you use I-weave 1, 2 or 3. Results & speeds are equal, it only changes the nozzle row that starts making the weave.

5. In case you need extreme sharpness, or if you see vertical grain lines appearing in solid colors (due to media cockling), or if you have a media that dries slowly, switch your print mode to **UNI-dir** printing. This will also counter left/right color differences should any be visible.

6. The quality descriptions of the print modes are relative per printer and they are in this table not sideways comparable. For example: A Medium Quality on the 1682SR CMYKcmk prints finer than a Medium Quality on the 1641SR, and will even print finer than a Normal Quality mode on 1641SR, due to the usage of light inks.

7. You are of course free to use any print mode available in the machine, but **in case you experience any quality issues**, we will always ask you to test your machine in the **SuperHigh Quality mode**, both in **Bi and Uni-dir** (to eliminate bi-dir or dot master issues), We also need to see a photo of the **header dump** to be absolutely sure that your rip software is using the correct commands (Setup menu - set 26: Header dump : Switch ON before making your print.) We will also ask you to **check the length** of your print to eliminate PF adjustment (step) issues. A print of 1000mm should differ maximum ± 1 mm to have good quality (keep in mind that your step adjust is influenced by the take-up). Measure both left and right side of your print, and DO NOT use a software length compensation, but a User step adjustment via the panel or PA command from rip **(Setup - User type - Type# - PF Adjust - 4 : Micro Print)**.