World Printers Forum Board Meeting, F.A.Z. Berlin Office
<table>
<thead>
<tr>
<th>No.</th>
<th>What?</th>
<th>Who?</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Welcome</td>
<td>Chair</td>
<td>17.00</td>
</tr>
<tr>
<td>2</td>
<td>Introduction of participants</td>
<td>Round-table</td>
<td>17.05</td>
</tr>
<tr>
<td>3</td>
<td>Approval of minutes of last meeting, 26 March 2019</td>
<td>all</td>
<td>17.10</td>
</tr>
<tr>
<td>4</td>
<td>New World Printers Forum Director at WAN-IFRA, new members for the World Printers Forum Board</td>
<td>Thomas Jacob, Secretary, all</td>
<td>17.15</td>
</tr>
<tr>
<td>5</td>
<td>Report from the meeting of the WAN-IFRA Board</td>
<td>Vincent Peyrègne</td>
<td>17.25</td>
</tr>
</tbody>
</table>
| 6   | Activity update 2019  
Print Innovation Awards 2019 report PIA18  
Report: Extend the life of your press  
Report: Changing Print  
Project: High-Value Print Production II  
International Color Quality Club 2020–2022  
World Printers Forum Conf. India, September 2019 | Secretary  
Prabhu  
Prabhu  
Magdoom | 17.35 |
|     | Coffee Break | | 18.15 |
| 7   | Berlin Publishing Days, 7–10 October 2019  
World Printers Forum Conference at FAZ  
IFRA & DCX Expo  
Berlin Publishing Night  
Berlin Publishing Tours | Secretary, all | 18.30 |
| 8   | New projects for 2020  
Series of reports under the general headline of “Extend the life of your press”  
• Retrofits,  
• Colour and register control  
• Automation (e.g. automatic plate change) | Secretary, all | 19.00 |
<p>| 9   | Next meeting in spring 2020 | all | 19.20 |
| 10  | Other business | all | 19.30 |
| 11  | Concluding remarks | Chair | 19.40 |
|     | End of the meeting | | 19.45 |</p>
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Herbert Kaiser, Koenig &amp; Bauer</td>
<td>Chair</td>
<td>Germany</td>
</tr>
<tr>
<td>Max Garrido, Corporation Bermont</td>
<td>Vice Chair</td>
<td>Spain</td>
</tr>
<tr>
<td>Anu Ahola, UPM Paper ENA</td>
<td></td>
<td>Finland</td>
</tr>
<tr>
<td>Andreas Gierth, Frankfurter Allgemeine Zeitung</td>
<td></td>
<td>Germany</td>
</tr>
<tr>
<td>Sanat Hazra, Bennett, Coleman &amp; Co</td>
<td></td>
<td>India</td>
</tr>
<tr>
<td>Thomas Isaksen, DDPFF</td>
<td></td>
<td>Denmark</td>
</tr>
<tr>
<td>Menno Jansen, Q.I. Press Controls BV</td>
<td></td>
<td>Netherlands</td>
</tr>
<tr>
<td>Rainer Kirschke, Agfa Graphics</td>
<td></td>
<td>Germany</td>
</tr>
<tr>
<td>Manuel Kosok, manroland web systems</td>
<td></td>
<td>Germany</td>
</tr>
<tr>
<td>Gideon Martz, MakroSolutions</td>
<td></td>
<td>Germany</td>
</tr>
<tr>
<td>Sally Pirri, The Globe and Mail</td>
<td></td>
<td>Canada</td>
</tr>
<tr>
<td>Mujo Selimović, Publisher “Oslobodjenje”</td>
<td></td>
<td>Bosnia and Herzegovina</td>
</tr>
<tr>
<td>Alexander Petsch, Publishing Exhibition</td>
<td></td>
<td>Germany</td>
</tr>
<tr>
<td>Heiko Stock, Publishing Exhibition</td>
<td></td>
<td>Germany</td>
</tr>
<tr>
<td>Vincent Peyrège, WAN-IFRA</td>
<td></td>
<td>France</td>
</tr>
<tr>
<td>Thomas Jacob, WAN-IFRA</td>
<td></td>
<td>Germany</td>
</tr>
<tr>
<td>Magdoom Mohamed, WAN-IFRA South Asia</td>
<td></td>
<td>India</td>
</tr>
<tr>
<td>Prabhu Natrajan, WAN-IFRA South Asia</td>
<td></td>
<td>India</td>
</tr>
<tr>
<td>Jaiganesh Muniasamy, WAN-IFRA South Asia</td>
<td></td>
<td>India</td>
</tr>
<tr>
<td>Ingi Rafn Olafsson, WAN-IFRA</td>
<td></td>
<td>Germany</td>
</tr>
<tr>
<td>Manfred Werfel, WAN-IFRA</td>
<td>Secretary</td>
<td>Germany</td>
</tr>
</tbody>
</table>

**Number of participants**: 17
3) Approval of minutes of last meeting, 26 March 2019
Hours of last meeting

The Minutes

1 Welcome and opening of the meeting

Dr. Rick Stunt, chairman of the World Printers Forum Board, welcomed the participants, thanked Mujo Selimović, Publisher "Oslobodjenje", and his team at for his kind invitation, and called the meeting to order.

2 Introduction of Participants

In a round-table participants introduced themselves. See the list of participants on page 1 of this document.

3 Introduction of Sabine C. Sirach,
   WAN-IFRA, Deputy Director, World Printers Forum

Sabine C. Sirach studied business & economics with a focus on marketing and psychology.

4 Approval of minutes of last meeting (12 Oct 2019)

The minutes of the meeting of the World Printers Forum Board on 12 October 2019 were approved without changes.

5 HPM group - private group of companies in Russia

Paige Holman presented his group of companies in a visual presentation to the participants.

6 LED technology in the printing process

Dr. presentation slides and samples distributed

LED printing offers a new way of printing text, images, and graphics on paper. The technology uses light-emitting diode arrays to create high-quality images with excellent color reproduction. Unlike traditional inkjet printers, LED printers can print on a wide range of substrates, including paper, board, and film. This allows for greater flexibility in the printing process and opens up new possibilities for designers and artists.

7 Changes in the World Printers Forum Board

The terms of the following WPB Board Members are ending: Michael Schumacher, Martin Heugel, and Marit Hardt. Their replacements are: Martin Heugel will be replaced by Sabine C. Sirach, Michael Schumacher will be replaced by Sabine C. Sirach, and Marit Hardt will be replaced by Sabine C. Sirach. The new Board Members will be elected by the World Printers Forum Board.

8 Election of new chair and vice chair of the Board

The board members elected Sabine C. Sirach as the new Chair of the WPB Board.
4) New World Printers Forum Director at WAN-IFRA, new members for the World Printers Forum Board
Ingi Rafn Olafsson
WAN-IFRA Director, World Printers Forum
## Terms of WPF Board Members

<table>
<thead>
<tr>
<th>No.</th>
<th>Board members</th>
<th>Member since</th>
<th>End of 1st term</th>
<th>End of 2nd term</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Herbert Kaiser, Koenig &amp; Bauer, Würzburg, Germany</td>
<td>2015</td>
<td>2017</td>
<td>2020</td>
</tr>
<tr>
<td>2</td>
<td>Anu Ahola, UPM, Helsinki, Finland</td>
<td>2017</td>
<td>2019</td>
<td>2021</td>
</tr>
<tr>
<td>3</td>
<td>Andreas Gierth, Frankfurter Allgemeine Zeitung, Frankfurt am Main, Germany</td>
<td>2017</td>
<td>2019</td>
<td>2021</td>
</tr>
<tr>
<td>4</td>
<td>Sanat Hazra, The Times of India Group, Mumbai, India</td>
<td>2017</td>
<td>2019</td>
<td>2021</td>
</tr>
<tr>
<td>5</td>
<td>Menno Jansen, Q.I. Press Controls BV, EAE, Oosterhout, Netherlands</td>
<td>2017</td>
<td>2019</td>
<td>2021</td>
</tr>
<tr>
<td>6</td>
<td>Mujo Selimović, Oslobodjenje, Sarajevo, Bosnia and Herzegovina</td>
<td>2017</td>
<td>2019</td>
<td>2021</td>
</tr>
<tr>
<td>7</td>
<td>Max Garrido, Corporation Bermont, Madrid, Spain</td>
<td>2018</td>
<td>2020</td>
<td>2022</td>
</tr>
<tr>
<td>8</td>
<td>Thomas K. Isaksen, DDPFF, Copenhagen, Denmark</td>
<td>2018</td>
<td>2020</td>
<td>2022</td>
</tr>
<tr>
<td>9</td>
<td>Sally Pirri, Managing, The Globe and Mail, Toronto, Canada</td>
<td>2018</td>
<td>2020</td>
<td>2022</td>
</tr>
<tr>
<td>10</td>
<td>Rainer Kirschke, Agfa Graphics, Düsseldorf, Germany</td>
<td>2018</td>
<td>2020</td>
<td>2022</td>
</tr>
<tr>
<td>11</td>
<td>Manuel Kosok, manroland web systems, Augsburg, Germany</td>
<td>2018</td>
<td>2020</td>
<td>2022</td>
</tr>
<tr>
<td>12</td>
<td>Gideon Martz, MakroSolutions, Schkeuditz, Germany</td>
<td>2018</td>
<td>2020</td>
<td>2022</td>
</tr>
</tbody>
</table>
Jürgen Schulze, Süddeutscher Verlag Zeitungsdruck

Mr. Schulze works in production control and also has a lot of experience with systems, technology in general and projects. He is in constant contact with the own publisher and external publishers for whom they print: FAZ, Handelsblatt, Die Welt, Bild etc.

He is also deeply involved in strategic projects as an authorised signatory of the printing centre.
5) Report from the meeting of the WAN-IFRA Board
6) Activity update 2019
Reports published in 2019

Print Innovation Awards 2018

Report published in March 2019

Three sponsors:
Agfa, Q.I. Press Control, UPM

Marketing item for promotion of Print Innovation Awards 2019
Reports published in 2019

**Extend The Life of Your Press**

Report published in August 2019

Launch at WAN-IFRA India in New Delhi, 18 and 19 September 2019
Reports published in 2019

Extend The Life of Your Press

CHAPTER 4 – METHODOLOGY AND APPROACH

Vibration: a back-and-forth mechanical motion like an oscillating pendulum. It creates a sinusoidal motion pattern. The maximum movement is referred to as amplitude, while the number of cycles per second is referred to as frequency. The frequency varies with the speed of the machine: the faster, the machine starts vibrating heavily at certain low RPM. When these machines are close to stopping, and the RPM nears zero, they vibrate heavily and then stop. Such machines are considered to be “flexible.”

Levels and meanings

Vibration is a back-and-forth mechanical motion like an oscillating pendulum. It creates a sinusoidal motion pattern. The maximum movement is referred to as amplitude, while the number of cycles per second is referred to as frequency. The frequency varies with the speed of the machine: the faster, the machine starts vibrating heavily at certain low RPM. When these machines are close to stopping, and the RPM nears zero, they vibrate heavily and then stop. Such machines are considered to be “flexible.”

Extraction from ISO 10816-3

<table>
<thead>
<tr>
<th>Frequency (Hz)</th>
<th>RMS Velocity (mm/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–2</td>
<td>1.4–2.3</td>
</tr>
<tr>
<td>2.3–2.8</td>
<td>3.5–4.5</td>
</tr>
<tr>
<td>4.5–7.1</td>
<td>7.1–11</td>
</tr>
<tr>
<td>7.1–11</td>
<td>&gt;11</td>
</tr>
</tbody>
</table>

Somnath Guha

Kolkata

ABP Pvt Ltd,
Engineering
VP, Production & Printing

What was your approach to the mechanical audit project? How did it align with your long-term maintenance goals?

The printing market is a competitive industry. The most valuable asset at least in monetary terms, is your press. It is not only your press itself. It is the entire system of the equipment or to extend it further, we could call it the “RPM.” Any problem with a press, which is more than 15–20 years old, would be a bottleneck you see in running a printing press, which is more than 15–20 years old. We don’t want to rush. It is the most valuable asset at least in monetary terms. In order to take full benefit of the printing press, it needs proactive maintenance, i.e., a preventive maintenance strategy for maintaining the reliability and availability of the machines. A mechanical audit is to be the first and only way to achieve the goal.

What are the general challenges/inhibitors you are facing in running a printing press?

When equipment becomes old, the major challenge would be to identify the points of potential failure and partial failure. Due to age-related issues these two points tend to come close if they are not properly assessed. These conditions need to be observed before a possible failure can become a reality.

What is the secret behind the successful maintenance of your press?

At ABP, we always follow a proactive maintenance strategy to keep our machines running in top shape. We plan our work and work as a ready reckoner. An involvement-based system is one of the best ways as it gives access across industry. Maintaining history of events in SAP itself. Involvement during installation process helps a great deal. We always try to follow the best practices in the industry. Maintaining system knowledge is a great way. We always try to follow the best practices in the industry. Maintaining system knowledge is a great way. We always try to follow the best practices in the industry. Maintaining system knowledge is a great way. We always try to follow the best practices in the industry. Maintaining system knowledge is a great way. We always try to follow the best practices in the industry.

How did your organisation execute the findings of the mechanical audit project?

What was your observation?

We went through the detailed report of ultrasound, thermographic and vibration analyses as per ISO 10816-3 standard, rather than allowing to do deeper analysis by applying some basic technical knowledge. It is recommended that a user could be used as an entry point to the ISO 10816-3 standard, which is a tip group 1 & 3 for vibrations lower than the group 4. For vibrations higher than the group 4, a group 5 & 6 standard, rather than allowing to read all important to measure the movement in all three directions and advanced measuring instruments are used.

How did your organisation execute the findings of the mechanical audit project? How did it align with your long-term maintenance goals?

What was your approach to the mechanical audit project? How did it align with your long-term maintenance goals?

The printing machine in a newspaper industry could be used as an entry point to the advanced measuring instruments can read all necessary levels and meanings for higher vibrations. It is recommended that a user could be used as an entry point to the EU 10816-3 standard, which is a tip group 1 & 3 for vibrations lower than the group 4. For vibrations higher than the group 4, a group 5 & 6 standard, rather than allowing to do deeper analysis by applying some basic technical knowledge.

It is recommended that a user could be used as an entry point to the ISO 10816-3 standard, rather than allowing to do deeper analysis by applying some basic technical knowledge.
Reports published in 2019

Changing Print

Report published in August 2019

15 authors, 39 experts in the working group

Topics: hot-metal, phototypesetting, laser image setting, Desktop-Publishing, CTP, CCD scanning, screening, standards, printing, presses, rollers, newsprint, mailroom, business
Why this report?

Learn from history for future
What were the game-changers?
What were the influencing factors?
Which problems had to be overcome?
Timeline

Johannes Gutenberg, mechanical typesetting and printing system

1450  1500  1550
Timeline

1800

1812
Friedrich Koenig, printing machine

1850

1866
John Walter III., The Times, rotary printing press

1886
Ottmar Mergenthaler, Linotype, typesetting machine
Innovation versus tradition in the printing industry

The printing industry has been tradition-oriented

Example: medieval initiation rites for the admission of new journeymen into the guild

Still practised today: “The couch party”
Neu Anspach, Germany, 21 July 2019
• Almost no changes for a long period
• Fundamental changes since 1970
Changes since 1970

- Phototypesetting
- Desktop Publishing
- Laser imagesetters
- Proof printers
- Electronic page makeup
- CCD scanners
- Computer to Plate
- Screening

- Colour management
- Industry standards
- Web offset printing
- Four-high press towers
- Shaftless press drives
- Newsprint, new paper types
- Semi-commercial printing
- New business models
Innovations

Innovations from outside had much stronger effects than innovations from inside the industry

Example: electronic page makeup

“A page a minute with everything in it”, mantra at the Minneapolis Star Tribune, 1970s
Monotype - Hastech Times
October 18, 1980
— IFRA 1980 —
Munich, West Germany

Electronic page produced with pictures in place

Hastech and Monotype Produce pages with pictures

HASTECH

Hastech full-service in Manchester
Capabilities of new makeup systems Expected to change newspaper makeup

What do you think of my resolution?
Why did full page output not become reality until 10 years later?

Typesetter manufacturers had their own typesetting language and their own fonts
No uniform output language such as PostScript
No interface standards to connect systems/devices
No networking standards for data transmission
Industry standards
Wolfgang Kummer (Linotype), John Warnock (Adobe) and Steve Jobs (Apple), 1985 in New York announcing the desktop publishing co-operation
What can you learn?

Our industry is part of the global media industry

Innovations from outside can play an important role

Customer requirements are more important than great ideas of R&D departments

A holistic view enables progress and innovation

The mailroom is an integrated part of production

Technical game-changers enable new and future-oriented business models
High-Value Print Production II

Responses to questionnaire from:

- Printer of national newspaper (F.A.Z.) – heatset
- Printer of national newspaper (F.A.Z.) – gravure
- Printer of regional newspaper (Freiburg) – high-end coldset
- National newspaper (Globe & Mail) – publisher
- Contract printer (Transcontinental) – coldset, heatset
- Contract printer (V-TAB) – coldset, heatset, sheetfed
High-Value Print Production II

26 pages of Q&As

Different perspectives of publishers and printers (coldset, heatset, sheetfed, gravure)

- We can evaluate and interpret the answers
- We can go back and clarify certain questions
- We can comment on the results (WPF board members)
- We can publish the evaluation/interpretation, the comments, and the Q&As in a WPF Report
Innovations in newspapers & magazines, presented by the World Printers Forum, the print community within WAN-IFRA
Time schedule

25 March 2019 – Registration opened

12 August 2019 – Registration closed

9 September 2019 – Jury decision

10 September 2019 – Winners announced

8 October 2018 – Winners honoured at “Berlin Publishing Night” of IFRA World Publishing Expo in Berlin, Germany
7 Categories

- Advertising Innovation
- Product Innovation
- New Products
- Redesigned Products
- Special Editions
- Young Reader Products
- Business Innovations
Participants

61 projects

23 countries Afghanistan, Austria, Bangladesh, Brazil, Colombia, Croatia, Denmark, France, Germany, Hong Kong, India, Indonesia, Korea, Liechtenstein, Nigeria, Norway, Poland, Puerto Rico, Singapore, Slovenia, Spain, Switzerland, United Kingdom
# Project partners

<table>
<thead>
<tr>
<th>Features of PIA19 sponsoring</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-page ad in the report 2018</td>
<td>March</td>
</tr>
<tr>
<td>50 copies of the report</td>
<td>April</td>
</tr>
<tr>
<td>Banner ad for 10 weeks on WPF website</td>
<td>June to August</td>
</tr>
<tr>
<td>Banner ad for 5 editions of the WPF newsletter</td>
<td>April to July</td>
</tr>
<tr>
<td>Sponsors on all marketing materials</td>
<td>since March</td>
</tr>
<tr>
<td>Interview with sponsors</td>
<td>10 Sept to 8 Oct</td>
</tr>
<tr>
<td>Logo on the certificate for the winners</td>
<td>8 October</td>
</tr>
<tr>
<td>Present the awards on stage</td>
<td>Publ. Night, 8 Oct</td>
</tr>
</tbody>
</table>
New structure of ICQC

- 3 month test period reduced to 1 month
- Test prints on 5 consecutive days in March 2020
- Days for test prints selectable by printers
- Jury meets in April for general print quality evaluation
Status International
Color Quality Club 2020–2022
WAN-IFRA India 2019 Conference
The 27th Annual Conference

South Asia's largest gathering of news publishers
The Leela Ambience, Gurugram
Programme examples

11:15  Looking back to leap forward

WAN-IFRA’s recent World Printers Forum Report “Changing Print – Turning points in newspaper technology since 1970” documented and analysed the milestone developments in the newspaper technology. These findings reveal interesting facts, which necessitated the invention of ground breaking technology and lessons we could learn from this study to change the course of newspapers business?

Speakers

Kasturi Balaji
Former Director, Kasturi & Sons Ltd

Gerhard Raab
Owner, Gerhard Raab International Consulting, Germany

Manfred Werfel
WAN-IFRA
14:50 Extend the life of your press

‘Extend the life of your press’ is the latest special report from WAN-IFRA based on Condition monitoring of printing presses project done at several newspapers printing plants. Learn from the findings of the project.

Speakers

Jaiganesh Muniasamy
Research Engineer, WAN-IFRA, India
7) Berlin Publishing Days, 7–10
<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> World Printers Forum Conference 2019, F.A.Z. office</td>
<td></td>
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</tr>
<tr>
<td><strong>2</strong> Berlin Publishing Night, TIPI, Print Innovation Awards 2019</td>
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<tr>
<td><strong>3</strong> DCX Digital Content Expo, including Conference</td>
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</tr>
<tr>
<td><strong>4</strong> IFRA World Publishing Expo including Conference</td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>5</strong> Berlin Publishing Tours: Print and Editorial</td>
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<td></td>
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</tbody>
</table>
FULL TICKET BERLIN PUBLISHING DAYS
World Printers Forum Conference, October 7th, 2019
Expo 2-day ticket, October 8th-9th, 2019
Berlin Publishing Night, October 8th, 2019
IFRA Berlin Publishing Tour, October 10th, 2019

WORLD PRINTERS FORUM CONFERENCE INCL. EXPO
World Printers Forum Conference, October 7th, 2019
Expo 2-day ticket, October 8th-9th, 2019
Berlin Publishing Night, October 8th, 2019
IFRA Berlin Publishing Tour, October 10th, 2019

IFRA BERLIN PUBLISHING TOUR INCL. EXPO
IFRA Berlin Publishing Tour, October 10th, 2019
Expo 2-day ticket, October 8th-9th, 2019
World Printers Forum Conference, October 7th, 2019
IFRA Berlin Publishing Tour, October 10th, 2019

BERLIN PUBLISHING NIGHT
Berlin Publishing Night on October 8th, 2019 @ Tipi Berlin
Power of Print
Digital-to-print revenue models
Newsprint market news
Newspapers’ Price hikes in the U.S.A.
Successful in Switzerland with innovation
Press and mailroom investments in Austria
Cost control through material tests
The future of maintenance: 3D printing
The relaunch of Fuldaer Zeitung
Innovation products for publishers
smartpaper24: customised newspapers
IFRA and DCX Expo

Venue
Berlin Messe

Programme
1 Conference stage, 3 Sessions per day
1 DCX Content stage for exhibitors
1 Content services & marketing stage, DCX
1 Stage in Start-Up Park
Berlin Publishing Night

Venue       TIPI at the Chancellery
Date/time   8 Oct, 6.30 pm
Programme  Dinner
            Print Innovation Awards 2019
            Live Music
Innovations in newspapers & magazines, presented by the World Printers Forum, the print community within WAN-IFRA

Redesigned Products
Gold Award

“Your Weekend” The Last Ever Issue
Agora
Warsaw, Poland
### Berlin Publishing Tours

<table>
<thead>
<tr>
<th>Two tours to three companies each</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Print</strong></td>
</tr>
<tr>
<td>Ohl, press logistics and distribution</td>
</tr>
<tr>
<td>Axel Springer Printing, Spandau</td>
</tr>
<tr>
<td>Pressedruck Potsdam</td>
</tr>
<tr>
<td><strong>Editorial</strong></td>
</tr>
<tr>
<td>Berliner Morgenpost</td>
</tr>
<tr>
<td>Der Tagesspiegel</td>
</tr>
<tr>
<td>Krautreporter</td>
</tr>
</tbody>
</table>
8) New projects for 2020
Possible projects 2020

Series of reports under the general headline of “Extend the life of your press”

- Retrofits
- Colour and register control
- Automation (e.g. automatic plate change)
- Press extensions (e.g. heatset, UV curing systems)

BDZV working group paper requests to improve and update the specs of DIN 19306-4

Contact: Johannes Degen, Pressehaus Stuttgart Druck

Information about DIN 19306

DIN 19306-1 General Specifications
DIN 19306-2 Commercial offset paper
DIN 19306-3 Gravure printing paper

Part 1-3 released 2002

DIN 19306-4 Newsprint

Part 4 released 2005
## DIN 19306-4: Newsprint

Table with characteristics and minimum requirements for:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Minimum requirements</th>
<th>Test according to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative equilibrium moisture content [%]</td>
<td>50 ± 6</td>
<td>DIN 53118</td>
</tr>
<tr>
<td>PPS roughness [µm]</td>
<td>2.0 to 6.0</td>
<td>DIN ISO 8791-4</td>
</tr>
<tr>
<td>Tensile strength MD [kN/m]</td>
<td>≥ 2.0</td>
<td>DIN EN ISO 1924-2</td>
</tr>
<tr>
<td>Elongation MD [%]</td>
<td>0.9 to 1.4</td>
<td>DIN EN ISO 1924-2</td>
</tr>
<tr>
<td>Specific volume, bulk [cm³/g]</td>
<td>1.2 to 1.6</td>
<td>E DIN EN ISO 534</td>
</tr>
<tr>
<td>Grammage [g/m²]</td>
<td>X ± 2 %, medium limiting deviation</td>
<td>DIN EN ISO 536</td>
</tr>
<tr>
<td>Opacity [%]</td>
<td>40.0 g/m² &gt; 91</td>
<td>ISO 2471:1998</td>
</tr>
<tr>
<td></td>
<td>42.5 g/m² &gt; 92</td>
<td></td>
</tr>
<tr>
<td></td>
<td>45.0 g/m² &gt; 92.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>48.8 g/m² &gt; 94</td>
<td></td>
</tr>
<tr>
<td></td>
<td>52.0 g/m² &gt; 94</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: If a maximum weight per unit area is agreed upon, the tolerance for the lower measure doubles itself.

NOTE: The opacity depends on the fillers content, the kind of pigment, pulp and brightness of the paper. For other grammages the opacity should be agreed accordingly.
### Newsprint

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Minimum requirements</th>
<th>Test according to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relative equilibrium moisture content [%]</td>
<td>50 ± 6</td>
<td>DIN 53118</td>
</tr>
<tr>
<td>PPS roughness [µm]</td>
<td>2.0 to 6.0</td>
<td>DIN ISO 8791-4</td>
</tr>
<tr>
<td>Tensile strength MD [kN/m]</td>
<td>≥ 2.0</td>
<td>DIN EN ISO 1924-2</td>
</tr>
<tr>
<td>Elongation MD [%]</td>
<td>0.9 to 1.4</td>
<td>DIN EN ISO 1924-2</td>
</tr>
<tr>
<td>Specific volume, bulk [cm³/g]</td>
<td>1.2 to 1.6</td>
<td>E DIN EN ISO 534</td>
</tr>
<tr>
<td>Grammage [g/m²]</td>
<td>X ± 2 % medium limiting deviation</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** If a maximum weight per unit area is agreed upon, the tolerance for the lower measure doubles itself.

| Opacity [%]              | 40.0 g/m² > 91         | ISO 2471:1998 |
|                         | 42.5 g/m² > 92         |                  |
|                         | 45.0 g/m² > 92.5       |                  |
|                         | 48.8 g/m² > 94         |                  |
|                         | 52.0 g/m² > 94         |                  |

**NOTE:** The opacity depends on the fillers content, the kind of pigment, pulp and brightness of the paper. For other grammages the opacity should be agreed accordingly.

<table>
<thead>
<tr>
<th>Tearing strength CD [mN]</th>
<th>&gt; 250</th>
<th>DIN EN 21974</th>
</tr>
</thead>
</table>

**Printability**

During the printing process no paper-dependent dusting, picking, linting may occur.

Due to missing testing methods the number of cylinder revolutions between the paper-dependent wash intervals should be agreed upon as criteria.

| Oil absorption [g/ m²] | 10 to 25                | as DIN EN 20535, but medium is castor oel according EUAP. |
Arbeitsgruppe Papier

Die Arbeitsgruppe Papier ist zuständig für Analysen beim Papiereinkauf und für die Beobachtung der Marktentwicklung im Papierbereich.

VORSITZENDER

» **Uwe Günther**, Münchner Merkur tz Druckhaus Dessauerstraße GmbH & Co. Betriebs KG, München

MITGLIEDER

» **Michael Bendel**, "Nürnberger Nachrichten", Nürnberg
» **Hans Joachim Böhm**, "Saarbrücker Zeitung", Saarbrücken
» **Johannes Degen**, Pressehaus Stuttgart Druck GmbH, Stuttgart
» **Paul Haanen**, Axel Springer SE, Berlin
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» **Volker Hotop**, Frankfurter Societäts-Druckerei GmbH, Mörfelden-Walldorf
» **Matthias Presotto**, Axel Springer SE, Berlin
» **Hildegard Kemper**, Axel Springer SE, Berlin
» **Steffen Kurps**, DuMont Mediengruppe, Köln
» **Gundula Ullah**, Funke Medien Services, Essen
» **Andreas Ullmann**, Presse-Druck und Verlags-GmbH, Augsburg
Study: periodical stopping printing

“A new study about periodicals stopping printing and going online-only. This new study is about a weekly news magazine (the UK’s New Musical Express) that went online only in 2018. The results are very similar to what I found for The Independent newspaper.”

Dr Neil Thurman, Professor, LMU Munich, Department of Media and Communication
Reach in print and digital in U.K.
The Independent case
Published: 2018
9) Next meeting
Topic suggestion

Thomas Isaksen: Worldwide newsprint trends
Nordic view Thomas Isaksen
The U.K. view Rick Stunt (to be invited)
Worldwide perspective Anu Ahola

Berlin 1919
10) Other business
Intergraf letter

Beatrice Klose, the secretary general of Intergraf, the European umbrella organisation of the national print associations, approached us.

They want to publish a letter to the European Commission to support the printed word and ask us to co-sign it.
PRINT is vital for critical thinking

August 2019

The use of mobile devices and social media for accessing news articles continues to increase. However, new research reveals that - regardless of age - readers’ comprehension of long informational texts is better on paper. It is therefore vital that we ensure that press, magazines and educational books, will continue to be published in print in the future.

While mobile devices and e-readers have had a surge in popularity, research published in 2019 proves that reading on paper still has its unique advantages. A group of scientists looked at the impact that digitisation has on reading practices by analysing 54 studies with more than 170,000 participants¹. They found that comprehension of long-form informational text is stronger when reading on paper than reading on screens, particularly when the reader is under time pressure. Other studies show that despite the popularity and accessibility of digital products, paper continues to be the preferred reading method for consumers, especially for long texts². Reading on paper has proven advantages including helping readers with their cognitive ability, concentration and retention, and building vocabulary and memory.

Living in a time of constant digital distraction, it is vital we preserve the proven benefits of print, especially when it comes to the content of newspapers and magazines that encourage in-depth reading. This form of reading is essential for European citizens to understand and form opinions of today’s political, economic and social situation in the world. Intergraf therefore calls on policy makers to not only raise awareness of the benefits of printed over digital media for informational texts, but to ensure that policy does not actively favour digital products when the benefits of reading print are so clear. Policymakers should also pay close attention to the direct relevance of these findings to the democratic engagement of society. In-depth reading is essential to understand and form opinions about the current political and economic environment. If digital media continues to
Reading. This form of reading is essential for European citizens to understand and form opinions of today’s political, economic and social situation in the world. Intergraf therefore calls on policy makers to not only raise awareness of the benefits of printed over digital media for informational texts, but to ensure that policy does not actively favour digital products when the benefits of reading print are so clear. Policymakers should also pay close attention to the direct relevance of these findings to the democratic engagement of society. In-depth reading is essential to understand and form opinions about the current political and economic environment. If digital media continues to grow at the expense of print, Europe could suffer from a less informed, less engaged electorate.

Immediate action is needed at all levels to ensure that content made available by newspapers and magazines continues to be published in print. It is everyone’s responsibility to promote printed magazines, newspapers and educational books which have been proven to facilitate comprehension and develop critical thinking.

**Intergraf calls on the European Commission to:**

- Recognise the proven advantages of printed press, magazines and educational books for better understanding of the subject matter and thus enabling the development of critical thinking;
- Refrain from a digital-only approach in the field of education and press;
- Promote the use of printed materials in schools and other education environments unless there is a proven learning advantage of digital;
- Support further independent research that measures the effects of digitisation on reading comprehension and critical thinking skills.

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1 For more information, please read COST Action E-READ initiative (www.ereadcost.eu)
2 Busting the Myths about Print and Paper, Two Sides, 2019 (www.twosides.info)
11) Concluding remarks


Die Terrasse neben dem Berliner Ensemble bietet genug Raum für bis zu 100 Sitzplätze, auf der Spreeterrasse haben 80 Gäste Platz. Aufgrund moderner Heizstrahler können die Terrassen auch bei kälteren Temperaturen genutzt werden.

GANYMED BRASSERIE
Schiffbauerdamm 5, 10117 Berlin
**English Menu**

**Starters**
Salad with roasted sunflower seeds and champagne dressing or vinegar and oil

**Main course**
Pink entrecôte from the lava stone grill, herb butter, French fries Pont Neuf ... or ...
Cod fillet with potato & herb crust on sautéed side dishes

**Dessert**
Caramel pear tartlet

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**Deutsches Menü**

**Vorspeisen**
Salat mit gerösteten Sonnenblumenkernen und Champagnerdressing oder Essig und Öl

**Hauptgang**
Rosa Entrecôte vom Lavasteingrill, Kräuterbutter, Pommes Pont Neuf ... oder ...
Kabeljaufilet unter Kartoffel-Kräuterkruste auf sautierten Seitlingen

**Dessert**
Karamel-Birnen-Törtchen