

CHARTER

of the R&D Working Group

as part of the EUROPEAN FORUM for RECIPROCATING COMPRESSORS e.V. (EFRC)

Rev.: July 20th, 2021

Under EFRC statutes, one of the purposes of the EFRC is to promote research in the field of reciprocating compressors. The **R&D Working Group** is the mean to pursue this goal. This Charter is the guideline for an efficient way of collaboration across the members and partners of the EFRC R&D Group.

Article I

Validity of the Charter

- (1) The Charter is agreed by all members of the EFRC R&D working group.
- (2) Changes to the Charter need a positive voting of two third of all members of the EFRC R&D Working Group.
- (3) Changes to the Charter need to be voted at the EFRC General Assembly if the total amount of Members of the R&D Working Group is less than 20 % of all EFRC members.
- (4) Changes to Article XII of the Charter need to be voted by the EFRC General Assembly.

Article II

Membership

- (1) Membership in the R&D Working Group is open to all EFRC members.
- (2) Membership registrations must be filed to the EFRC Office or the Chairman of the R&D Working Group by using the R&D Application Form.
- (3) The Membership time periods (work years) are calendar years and membership is unlimited unless the Member indicates to leave the R&D Group.
- (4) Membership fees are valid for a full work year and the minimum amount is defined by the character of the member's business and turnover as follows:
 - (i) End-Users: 1,000 € cash or 5,000 in-kind
 - (ii) Academic institutions: 1,000 € cash or 5,000 in-kind
 - (iii) Non-profit-organizations: 1,000 € cash or 5,000 in-kind
 - (iv) SME's (< 1 mio. €): 1,000 € cash or 5,000 in-kind
 - (v) Consultancies: 5,000 € cash
 - (vi) OEM/supplier:
(based on turnover)

< 5 mio. €	⇒ 5,000 € cash
< 10 mio. €	⇒ 7,500 € cash
≤ 100 mio. €	⇒ 10,000 € cash
> 100 mio. €	⇒ 20,000 € cash

- (5) Changes in Membership fees must be discussed within one of the Member's Meetings and they need a voting (see Article XI) to be accepted.
- (6) Membership fees must be paid till 30th of June for the active work year.
- (7) Leaving the R&D Group requires an official document (letter to the EFRC Office or the R&D Chairman) until the December 31st of the last year of membership (prior to the year of non-membership).

Article III **R&D Chairman**

- (1) The Chairman of the R&D Working Group shall be elected during the EFRC's General Assembly.
- (2) The Chairman shall serve a three-year term unless the Member's Meeting stipulates a different term. He/she shall in any case keep the Chair until a new Chairman has been named.
- (3) The Chairman represents the R&D Working Group in relation to EFRC and in relation to third parties.
- (4) To the extent that the Chairman of the R&D Working Group has actions to take as a representative on behalf of the EFRC under the provisions of this Charter, the EFRC Board shall grant him/her a written power of attorney indicating his/her authority to represent the EFRC.
- (5) The Chairman must respect and implement the resolutions passed by the Meetings of the R&D Working Group Members.
- (6) The Chairman shall chair the Member's Meetings. If he/she is unable to attend, the member with the oldest membership present shall chair the Meeting.

Article IV **Focus Groups**

- (1) Focus groups are building the framework for Proposals and Research & Development Projects.
- (2) A minimum of 2 and a maximum of 5 Focus Groups are a good balance between enough research variety and an effective focusing of the research efforts.
- (3) The Topics of the Focus Groups are chosen by the R&D Members during the Member's Meeting, there new Focus Groups can be chosen and/or it can be decided to close a Focus Group.
- (4) Every Focus Group has a Focus Group Leader, which must be a Member of the EFRC R&D Working Group.
- (5) The Focus Group Leader is responsible for setting up meetings to foster ideas that can be turned into new proposals leading to R&D projects.
- (6) The R&D Members will elect the Focus Group Leader at the R&D meetings for a period of 3 years.

Article V
Member's Meetings

- (1) A minimum of 2 physical annual Meetings of the Members (spring and fall meeting) ensures a sufficient collaboration between the Members.
- (2) A Member's Meeting shall be convened by the Chairman. The invitation must go out to every member of the R&D Working Group and to all other EFRC Members.
- (3) The invitations must be mailed by 30 days before the date of the Meeting at the latest. They must indicate the exact time and venue of the Meeting and the agenda of the Meeting.
- (4) Every member of the R&D Working Group shall be entitled to ask the Chairman in writing to include further items in the agenda. This request must be received by the Chairman at the latest four working days prior to the Meeting.
- (5) The Meetings shall constitute a quorum if at least one half of the Members are present or duly represented (refer to Article XI – Voting Procedure)
- (6) Beside the regular Meetings of all Members, additional physical Meetings or online Meetings for special topics and/or project related Meetings are beneficial for improving the quality of collaboration.
- (7) An extra physical Meeting among all Members must be held if at least one third of the Members so request. The Chairman shall also be entitled to convene this Meeting.
- (8) Universities can attend to the Members Meeting without financial contribution but also without voting rights. They must sign a Non-disclosure agreement.

Article VI
Duty of Member's Meeting

- (1) During the Member's Meeting the Members should organize the Focus groups by the following actions:
 - a) Focus Group Leaders should give an update about the Focus Group activities
 - b) Discussion about the Focus Group topics and if new Focus Groups are needed or if it is necessary to close a Focus Group
 - c) Taking decisions about the choice of Focus Group Leaders
- (2) The Members should support the R&D Projects by the following actions:
 - a) To pre-select proposed ideas and Pre-Proposals;
 - b) To vote on final Proposals to be accepted as new Projects;
 - c) To fix responsibilities for given Projects;
 - d) To update the Members about the progress and results of Projects;
 - e) To give support to the executing parties of active Projects;

- (3) Tasks concerning the financial situation are:
 - a) To fix the contributions members are obliged to pay;
 - b) To set the budget for the following working year
- (4) To fix date and location of the next meeting

Article VII

R&D Project Selection Process

- (1) R&D Projects have to be precompetitive
- (2) Pre-Proposals are the starting points for upcoming Projects; Members can vote on Pre-Proposals to express their support for a Project idea
- (3) Pre-Proposals are turned into full Proposals by the executing parties
- (4) Full Proposals must include:
 - a) Description of the Project objectives and scope
 - b) Description of the benefit to our industry
 - c) Description of the type of the Project, e.g. feasibility study, proof of concept, literature study, fundamental research and others...
 - d) List of Project deliverables: reports, test results, programs, etc.
 - e) Description of resources to be used to perform the work
 - f) Project planning, including major milestones
 - g) Cost overview, including anticipated cost breakdown
 - h) Description of pre-competitive aspects and limitations

The “Standard EFRC Project Application Form” must be used for this purpose.
- (5) Larger Projects must be divided into annual phases, so that an application for these phases can be submitted each work year.
- (6) A Member’s Voting is performed to turn a Proposal into an accepted Proposal
- (7) An accepted Proposal will be turned into an active Project if it fits into the current Research budget; otherwise, it can be stored as “Project backlog” for future use, but it needs to be “re-voted” for activation.
- (8) Research Contracts of Active Projects must be signed by the Chairman of the R&D Working Group and by a Member of the EFRC Board.
- (9) If a Single Member feels that a Project violates his own interests as being non pre-competitive and this cannot be solved within a Members Meeting or with the Chairman, then the member can escalate its concerns to the EFRC board. If the conflict of interests cannot be solved by the board, then it will be discussed at the EFRC General Assembly. The Project process is “on hold” until the conflict of interests is solved.
- (10) The Chairman is responsible that every Member is informed about new Pre-Proposals and/or Proposals to keep everyone up to date about the R&D progress.

Article VIII

R&D Project Selection Criteria

- (1) Projects must be selected based on their attractiveness and on the basis of the total contributions the members of the R&D Working Group must render or commit to for the projects.
- (2) R&D Projects must fulfil the following criteria:
 - a) Conform with the EFRC statutes
 - Improve attractiveness of reciprocating compressors
 - Improve product safety, reliability and service life
 - Create an in-depth understanding of functions and principles
 - b) Emphasize future aspects
 - c) The Projects must be on common interest; more than one EFRC Member must be willing to invest in the project in the form of contributions
 - d) Should have no substantial impact/advantage for a single Member
 - e) Have reasonable chance of success
- (3) All selected projects constitute the Annual R&D Work Program

Article IX

R&D Project Execution

- (1) The executing party commences work on the active Project and prepares intermediate Reports and presentations according to the Project schedule
- (2) The executing party needs not to be an EFRC Member, but if the non-member participates at an R&D meeting, it must sign a “Non-Disclosure-Agreement”
- (3) The Project manager of the executing party is responsible for:
 - a) Keeping track that the Project work is carried out according to the original timeline and budget.
 - b) Providing financial overview to ensure that the budget will not be exceeded
 - c) Approving any expenditure in case of consultancy or support by 3rd parties
 - d) Providing interim Project updates to the Project Coordinator or the Advisory Committee
- (4) The executing party finalizes the Project and delivers the Final Report and other deliverables to the Chairman for distribution.
- (5) The executing party is supported by a Project Coordinator (Smaller Projects) or an Advisory Committee (Larger Projects)

Article X

Project Support

- (1) For smaller Projects, a Coordinator (on a volunteering basis) is assigned to the active Project. This can also be a Focus Group instead of a “physical person”.
- (2) The Project Coordinator supports the executing party to complete the Project within the requested time and cost frame and according to the original scope and task

- (3) Larger Projects (e.g. multiple milestones, complex interconnecting work packages) require an Advisory Committee for the appropriate support to the executing party. If the Project is progressing well and smaller support is enough, the Advisory Committee can transfer the responsibility to a Project Coordinator
- (4) The Project Coordinator/The Advisory Committee is external to the executing party

Article XI

Voting Procedure

- (1) Each Member of the R&D Working Group has one Vote
- (2) At least half of the members must participate in order to have a valid voting
- (3) A Voting can be performed physically at a Member's Meeting or it can be held as an Online Voting
- (4) Votes can be transferred to a delegate, but this must be officially confirmed by the non-participating party and this confirmation is only valid for a specific Member's Meeting
- (5) For Project related decisions (e.g. Proposal selection, Changes in Project Scope, Timeline or other topics) the procedure is as follows:
 - i) The Vote can be either "In Favor" or "Against"
 - ii) At least 50 % of the present votes must be in Favor to be regarded as a positive Outcome
- (6) Organizational changes (e.g. Personnel decisions, Membership fees, R&D budget related decisions) need a majority of at least two thirds of "in Favor" of the present votes.

Article XII

Intellectual Property Rights

- (1) No parallel EFRC R&D Projects of the same topic are allowed, as this will lead to difficulties concerning the IP rights.
- (2) No EFRC R&D Project is allowed if a Member is working bilaterally with the same research partner on the same topic.
- (3) The EFRC shall be entitled to all rights, in particular exploitation rights to the work results of the R&D Working Group, as well as incorporeal rights (rights to intellectual property) to the extent permitted in law.
- (4) EFRC Members who have belonged to the R&D Working Group for the duration of a given Project and who have rendered their contributions in full shall receive a documentation of the results and shall be granted the corresponding license rights free of charge.
- (5) EFRC Members who have not belonged to the R&D Working Group for the duration of a given project shall have the opportunity to acquire these license rights the same as the members who have belonged to the R&D Working Group for the duration of a given project by rendering a mutually agreed upon monetary contribution

or contribution in kind to EFRC. The conditions have to be decided by the Members that where financing this specific project (Even if they are not R&D members anymore). To get to a valid decision, every of those financing Member has to agree to the proposed conditions.

- (6) Licenses granted to the Members in this way shall be non-transferable. The Member shall therefore not be entitled without the written approval of EFRC to pass these licenses on in full or in part to third parties. No Member has an automatic claim to receive such approval from EFRC.
- (7) Development of Competitive Products and/or Service can be started by Single Members after the official finalization of the Project and the distribution of all Deliverables.
- (8) Upon completion of projects which also yield software development such software shall be made available to Members that are granted the license rights.
- (9) In case such software can be maintained by the research contractor preferably the software (executable) shall be made available through web services minimizing maintenance effort. Maintenance costs shall be borne by the R&D Working Group and continuation of such support shall be voted upon by the R&D Working Group.
- (10) In case software can be maintained by the research contractor but one of the Members of the R&D Working Group requests to make the source code available (e.g. for their further development and/or implementation in their own software tools) it shall be voted upon by the R&D Working Group to make the source code available. In case the source code is made available this is to be maintained by the receiving party.
- (11) In case the research contractor cannot continue in providing maintenance services the software shall be delivered to the Members that are granted the license rights in executable format and backed up by provision of source code to be maintained by the receiving party.
- (12) Developed software may be used for commercial use by the research contractor under the following conditions:
 - i) For direct assignments received by EFRC or another contractor of EFRC that is involved in a research project;
 - ii) For third party assignments that strictly relate to general consultancy and not to research or development regarding reciprocating compressors;
 - iii) For third party assignments that relate to research and development regarding reciprocating compressors, if and when prior written approval therefore is acquired by research contractor from all EFRC R&D group members, which shall not be withheld without good reason.
- (13) To safeguard all rights and responsibilities set out in this Article XII, the R&D Working Group shall only engage any third party in research projects if and when such third party is willing to agree by virtue of a written contract to transfer all rights to know-how and all intellectual property rights which are generated in the research project to EFRC or any member thereof. In the event where the use of such intellectual property rights may reasonably require access to

background information of that third party, the R&D Working Group shall claim sufficient rights thereto in said written contract.