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|  | | **“SMNPO- ENGINEERING” JSC** | | Ukraine, 40009, Sumy,  58, Gorkogo Str.,  sumy-frunze.com | | |
|  | |  | | ***E-mail: technical@sumy-frunze.com*** | | |
| Data Sheet No. **Centrifuge Equipment** | | | | | | |
| **No.** | **Question** | | **Reply** | | | |
| 1 | Suspension (emulsion) | |  | | | |
| 2 | Concentration: (S:L)- for two-phase mixtures | | Solid phase, weight, % \_\_\_\_ vol.% \_\_\_\_  Liquid phase, weight, % \_\_\_\_ vol.% \_\_\_\_ | | | |
| (S:L light: L heavy)–for three phase mixtures;  S-solid phase; L light liquid phase (oil); L heavy -heavy liquid phase (water). | | Solid phase, weight,% \_\_\_\_ vol.% \_\_\_\_  Light liquid phase, weight,% \_\_\_\_ vol.% \_\_\_\_  Heavy liquid phase, weight,% \_\_\_\_ vol.% \_\_\_\_ | | | |
| 3 | Suspension temperature when entering centrifuge | |  | | | |
| 4 | Corrosive properties of the centrifuged product. рН value. Material resistant in the processed medium. | |  | | | |
| 5 | Toxicity, fire risk, explosion hazard | |  | | | |
| 6 | Description, chemical composition of the solid phase | |  | | | |
| Specific gravity of the solid phase, kg/m 3 | |  | | | |
| Granulometric composition of the solid phase: | | \_\_\_\_\_\_\_\_%\_\_\_\_\_\_\_\_micron;  \_\_\_\_\_\_\_\_%\_\_\_\_\_\_\_\_micron;  \_\_\_\_\_\_\_\_%\_\_\_\_\_\_\_\_micron;  \_\_\_\_\_\_\_\_%\_\_\_\_\_\_\_\_micron; | | | |
| Average particle size: | | \_\_\_\_\_\_\_\_micron; | | | |
| The presence of the insoluble impurities  (amount, particle size). | |  | | | |
| Solid phase particle shape (e.g. round, amorphous) | |  | | | |
| Type of the solid substance (fibrous, crystalline, sticky, smearing, carbonizing properties, thixotropic) | |  | | | |
| Cake abrasive properties | |  | | | |
| Time of solid particles settling in measuring cup | | \_\_\_\_\_\_\_\_\_hours | | | |
| 7 | Characteristics of the liquid phase | | For two phase mixtures | | For three phase mixtures | |
| Light | Heavy |
| Description, chemical composition of the liquid phase | |  | |  |  |
| Liquid phase density, kg/m 3 | |  | |  |  |
| Liquid phase viscosity (at working temperature) | |  | |  |  |
| The tendency of the liquid phase to foaming, crystallization, the presence of volatile substances, the possibility of its contact with air | |  | |  |  |

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| **Required operating factors and conditions of centrifuge** | | |
| **No.** | **Question** | **Reply** |
| 8 | Centrifuges service |  |
| 9 | Required performance: |  |
| Performance per day | \_\_\_\_\_\_\_m3/day\_\_\_\_\_\_\_\_kg, cake/day |
| Performance per hour | \_\_\_\_\_\_\_m3/h\_\_\_\_\_\_\_\_kg, cake/h |
| Operating hours per day | \_\_\_\_\_\_\_\_h/day |
| 10 | Centrifuge operating duty | \_\_\_\_continuous;\_\_\_periodic |
| 11 | Required final moisture of the cake, weight % |  |
| 12 | Allowable content of the solid phase, weight % | In light phase \_\_\_\_\_  In heavy phase\_\_\_\_\_ |
| 13 | Allowable content of the heavy phase in the light phase, weight % |  |
| 14 | Allowable content of the light phase in the heavy phase, weight % |  |
| 15 | Necessity to flush the cake and separate removal of flushing liquid, its characteristics |  |
| 16 | Acceptability to crush the solid phase during centrifugation |  |
| 17 | Description of the cake crystals solvent and its application for the sieves surfaces regeneration |  |
| 18 | Desired type of the centrifuge as per catalog |  |
| 19 | Necessity to heat or cool, to collect gases, vapors during centrifugation |  |
| 20 | The nature of the indoor environment where the centrifuges will be installed: humidity, dustiness, presence of gases and vapors, temperature, class as per Electrical Installation Code |  |
| 21 | Requirements to motor version (open, protected, explosion proof), electric line voltage |  |
| 22 | Indoor centrifuge location (drawing is preferable) specifying the centrifuge power supply and the unloading of the processed products |  |
| **Existing Methods of Processing the Specified Suspension (Emulsion)** | | |
| 23 | Types of equipment and its parameters: centrifuge diameter and speed, filtration surface and pressure, area for settlers |  |
| 24 | Quantitative and qualitative operating parameters: performance, cycle duration as per operations, final humidity of the cake, degree of centrate clarification, energy consumption per the product unit weight, settling rate in gravity field. |  |
| 25 | Characteristics of the used underlay and working sieves, fabrics: mesh size of sieves, material, type of fabric |  |

The date sheet shall be completed in full, if some data is unknown put down the word “unknown” in the appropriate column.

Customer:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Tel./fax:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Address:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Е.mail: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Surname (person in charge)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_