

豆腐製造職種（豆腐製造作業）

Job category: Tofu manufacturing (Operation: Tofu manufacturing work)

作業の定義 Criteria of Operations	原材料の受け入れ・保管の確認でコンタミの防止や土砂等の除去を行い、かつ洗浄で耐熱性土壌菌の除去を行う。次に大豆組織を柔らかくするために大豆の浸漬を季節に応じて一定時間行う。その柔らかくなった大豆を加水しながら磨砕し呉を作る。この呉を煮沸し、ろ過することで豆乳とおからに分離させる。出来上がった豆乳に凝固剤を添加し、豆腐に仕上げる。豆腐を包装したうえで加熱殺菌をし、冷却、異物検査を経て最終商品に至るまでの一連の工程を行う作業をいう。 Tofu manufacturing work refers to the work involving a series of processes from receiving and storage of raw materials to the production of the final product, including confirmation of raw material conditions, prevention of contamination and removal of soil and other foreign matter, and washing to remove heat-resistant soil bacteria. The work also includes soaking soybeans for a certain period of time according to the season to soften the soybean structure, grinding the softened soybeans with added water to produce soybean slurry, boiling and filtering the soybean slurry to separate soy milk and okara, adding coagulant to the resulting soy milk to produce tofu, and packaging, heat sterilization, cooling, and foreign matter inspection until the final product is completed. 実習実施者は、豆腐製造設備や金属探知機が完備されていることなど必須業務を技能実習生に行わせることができる要件を満たすことと、関連業務である排水設備を保有していることを日本豆腐協会が確認した事業所である必要がある。 The implementing organization must satisfy the requirements for providing technical intern trainees with the mandatory work, including being equipped with tofu manufacturing facilities and a metal detector. In addition, the implementing organization must possess wastewater treatment facilities as part of the related work and be certified by the Japan Tofu Association as meeting these requirements.	
	第 1 号技能実習 Technical Intern Training (i)	第 2 号技能実習 Technical Intern Training (ii)
	（ 1 ）豆腐製造作業 Tofu manufacturing work ①浸漬作業 Soaking work 1．浸漬大豆吸水状態確認作業 Inspection of soybean water absorption during soaking ②磨砕作業 Grinding work 1．呉汁確認作業 Inspection of soybean slurry ③加熱作業 Heating work 1．豆乳プラント操作作業（パネルの各種条件設定操作） Soy milk plant operation work (including operation of the control panel for various parameter settings) ④分離作業 Separation work 1．大豆の絞り状態確認作業 Inspection of soybean pressing conditions 2．豆乳濃度確認作業 Inspection of soy milk concentration ⑤凝固作業 Coagulation work 1．凝固機操作作業（パネルの各種条件設定操作）、凝固手作業 Coagulator operation work (including operation of the control panel for various parameter settings) , manual coagulation work	（ 1 ）豆腐製造作業 Tofu manufacturing work ①浸漬作業 Soaking work 1．浸漬槽操作作業 Soaking tank operation work 2．浸漬大豆吸水状態確認作業 Inspection of soybean water absorption during soaking ②磨砕作業 Grinding work 1．豆すり機操作作業 Soybean grinder operation work 2．呉汁確認作業 Inspection of soybean slurry ③加熱作業 Heating work 1．豆乳プラント操作作業（季節ごとの豆乳の状態に応じたプラント操作含む） Soy milk plant operation work (including operation according to the condition of soy milk in each season) ④分離作業 Separation work 1．大豆の絞り機操作作業 Soybean press operation work 2．大豆の絞り状態確認作業 Inspection of soybean pressing conditions 3．豆乳濃度確認作業 Inspection of soy milk concentration ⑤凝固作業 Coagulation work 1．凝固機操作作業（季節ごとの豆乳の状態に応じた凝固機操作含む） Coagulator operation work (including operation according to the condition of soy milk in each season) 2．凝固手作業(季節ごとの豆乳の状態に応じた凝固剤添加量調整含む) Manual coagulation work (including adjustment of the amount of coagulant added according to the condition of soy milk in each season)

必須業務（移行対象職種・作業で必ず行う業務） Compulsory works（Works to be essential on the operations in the job categories to be shifted))	⑥こわしならし作業 Breaking and leveling work 1．成型機操作作業、こわしならし手作業 Molding machine operation work and manual breaking and leveling work ⑦カット作業 Cutting work 1．カット・ケーサー操作作業、カット手作業 Operation of the cutting and casing machine and manual cutting work ⑧包装作業 Packaging work 1．容器供給作業 Container supply work 2．豆腐検品作業 Tofu inspection work 3．包装機操作作業 Packaging machine operation work 4．包装印字機操作作業 Package printing machine operation work ⑨加熱殺菌作業 Heat sterilization work 1．ボイルクール槽操作作業(温度と時間) ⑩製品作業 Final product handling work 1．金属探知機操作作業(探知精度確認) Metal detector operation work (verification of detection accuracy)	⑥こわしならし作業 Breaking and leveling work 1．こわしならし機操作作業、こわしならし手作業 Operation of the breaking and leveling machine and manual breaking and leveling work 2．成型機操作作業 Molding machine operation work ⑦カット作業 Cutting work 1．カット・ケーサー操作作業、カット手作業 Operation of the cutting and casing machine and manual cutting work 2．同調コンベア操作作業 Operation of the synchronized conveyor ⑧包装作業 Packaging work 1．容器供給作業 Container supply work 2．豆腐検品作業 Tofu inspection work 3．包装機操作作業 Packaging machine operation work 4．包装印字機操作作業 Package printing machine operation work ⑨加熱殺菌作業 Heat sterilization work 1．ボイルクール槽操作作業 Boil-cool tank operation work ⑩製品作業 Final product handling work 1．金属探知操作作業(探知精度確認) Metal detector operation work (verification of detection accuracy)
	（２）食品衛生業務 ① 衛生的な手洗い ② 使用水の管理 1．「色」「にごり」「臭い」「味」の確認、塩素濃度測定 2．井戸水を使用している場合は、年に1回の水質検査の実施 （３）安全衛生業務 ① 製造室持ち込み禁止品の確認 ② 製造室の整理・整頓・清掃 ③ 機械・器具の洗浄、消毒・殺菌及び破損の確認 ④ 従業員の健康管理 ⑤ 衛生的な作業衣の着用 ⑥ 転倒防止対策（靴の点検、着用を含む）、転落防止(脚立などからの転落防止)、切創防止対策、機械巻き込まれ防止、火傷防止対策等の教育、危険物（次亜塩素酸ソーダ等）の取り扱い講習、AED取り扱い講習の実施 ⑦ 雇い入れ時、作業変更時等の安全衛生教育 ⑧ 作業開始前の安全確認作業	(2) Food hygiene work ① Proper handwashing ② Management of water used in production 1. Checking the color, turbidity, odor, and taste of the water, and measuring the residual chlorine concentration 2. Conducting an annual water quality test when well water is used (3) Safety and health work ① Checking items prohibited from being brought into the production room ② Organizing, tidying, and cleaning the production room ③ Cleaning, sanitizing, and sterilizing machinery and equipment, and checking for damage ④ Employee health management ⑤ Wearing sanitary work clothing ⑥ Receiving education and training on fall prevention (including inspection and proper use of footwear), prevention of falls from heights (such as from stepladders), prevention of cuts, prevention of entanglement in machinery, prevention of burns, handling of hazardous substances (such as sodium hypochlorite), and AED operation ⑦ Receiving safety and health education at the time of employment and when work assignments are changed ⑧ Safety checks before starting work

関連業務、周辺業務 （上記必須業務に 関する技能等の修得 に係る業務等で該当 するものを選択するこ と。） Related works, Peripheral works (Select what is applicable in works related to acquisition of skills etc. concerning above essential tasks.)	(1)関連業務 ①金属探知機の取り扱い（開始時チェックと反応時の対応） ②出荷準備作業（包装機の取り扱い） ③ケース・スタッカー操作作業 ④よせとうふ ⑤大豆受け入れ作業 (2)周辺業務 ①排水処理設備の管理 ②出荷庫の清掃 ③廃棄用おから袋の管理 ④廃棄物の管理（包材容器・豆腐残渣） (3)食品衛生業務 ※上記必須業務（2）食品衛生業務に同じ (4)安全衛生業務 ※上記必須業務（3）安全衛生業務に同じ	(1) Related work 1. Operation of the metal detector (start-up check and response to detection) 2. Preparation for shipment (operation of the packaging machine) 3. Case stacker operation work 4. Yose tofu production work 5. Soybean receiving work (2) Peripheral work 1. Management of wastewater treatment facilities 2. Cleaning of the shipping storage area 3. Management of okara disposal bags 4. Waste management (packaging containers and tofu residue) (3) Food hygiene work Same as the mandatory Food hygiene work in (2) above. (4) Safety and health work Same as the mandatory Safety and health work in (3) above.
使用する素材、材 料等（該当するも のを選択するこ と。） Materials to be used (Select the appropriate one)	①大豆、植物油、凝固剤（にがり等）、がんもどき素材（れんこん、たまねぎ、人参等） Soybeans, vegetable oil, coagulants (e.g., nigari), and ingredients for ganmodoki (e.g., lotus root, onion, and carrot) ②容器、包装資材、ダンボール Containers, packaging materials, and corrugated cardboard boxes	
使用する機械、器 具等（該当するも のを選択するこ と。） Machines, equipment, tools etc. to be used (Select the appropriate one)	（1）施設 Facilities 1. サイロ 2. 浸漬槽 3. グライNDER 4. 煮釜 5. おから絞り機 6. 豆乳タンク 7. 凝固成型機 8. 水さらし水槽 9. 二次殺菌装置 10. ボイラー 11. 排水設備、排水処理設備 12. オカラ処理、保管設備 13. フォークリフト等の搬送設備 14. 消防設備 15. ゴミ処理設備 16. 洗浄設備 1. Silo, 2. Soaking tank, 3. Grinder, 4. Boiling kettle, 5. Okara press, 6. Soy milk tank, 7. Coagulating and molding machine, 8. Cooling water tank, 9. Secondary sterilization equipment, 10. Boiler 11. Wastewater collection and treatment facilities, 12. Okara processing and storage facilities 13. Material handling equipment (e.g., forklifts), 14. Fire protection equipment 15. Waste disposal facilities, 16. Cleaning facilities （2）機械、器具、工具 Machinery, equipment, and tools 1. 原料洗浄機、原料計量器 2. 消泡剤添加機 3. プレートクーラー 4. 凝固剤混合機 5. 充填機 6. 包装シール機 7. 計量機器 8. 金属探知機 9. X線探知機 10. ラベル発行機 11. 容器、器具洗浄機 12. 台車 13. コンテナ殺菌用タンク 14. 洗浄用ブラシ 15. その他器具類（濃度計、中心温度計、細菌検査器具） 1. Raw material washer and raw material weighing equipment, 2. Defoaming agent dispenser, 3. Plate cooler 4. Coagulant mixer, 5. Filling machine, 6. Packaging sealing machine, 7. Measuring instruments 8. Metal detector, 9. X-ray inspection system, 10. Label printer, 11. Container and utensil washer 12. Trolley, 13. Tank for sterilizing containers, 14. Cleaning brush 15. Other tools and equipment (concentration meter, core thermometer, and bacteriological testing equipment)	

製品等の例（該当するものを選択すること。） Examples of products etc. (Select the appropriate one.)	1. 木綿豆腐 2. ソフト木綿豆腐 3. 絹豆腐 4. 充填豆腐 5. 寄せ豆腐 6. 焼き豆腐 7. オカラ 1. Momen tofu (firm tofu), 2. Soft momen tofu, 3. Kinugoshi tofu (silken tofu), 4. Filled tofu, 5. Yose tofu, 6. Grilled tofu, 7. Okara
移行対象職種・作業とはならない業務例 Example of works which is not eligible for the job categories / operations to be shifted	1 乾燥おかから製造作業 2 飲料用豆乳製造作業 3 湯葉製造作業 4 フライヤーを使用する作業 5 上記の関連業務及び周辺業務のみの作業 1. Dried okara manufacturing work, 2. Soy milk beverage manufacturing work 3. Yuba manufacturing work, 4. Work involving the use of a fryer 5. Work consisting only of the related work and peripheral work described above